# THE ANNUAL

OF THE

# BRITISH SCHOOL AT ATHENS

No. VIII.

**SESSION 1901–1902**

PRINTED FOR THE SUBSCRIBERS AND SOLD ON THEIR BEHALF BY
MACMILLAN & CO., LIMITED
LONDON

PRICE SEVENTEEN SHILLINGS NET

~~P.S.I~~ [illegible]

63 Periodicals [British School]

University of London

SHL
WITHDRAWN

Digitized by the Internet Archive
in 2026

https://archive.org/details/annual-of-the-british-school-at-athens_1901-1902_8_1

# THE ANNUAL

OF THE

# BRITISH SCHOOL AT ATHENS

## No. VIII.

SESSION 1901–1902

PRINTED FOR THE SUBSCRIBERS AND SOLD ON THEIR BEHALF BY
MACMILLAN & CO., LIMITED
LONDON

12502

# THE BRITISH SCHOOL AT ATHENS.

## PATRON.—HIS MAJESTY THE KING.

## MANAGING COMMITTEE, 1901—1902.

Edwin Freshfield, Esq., LL.D.
Sir Richard Jebb, Litt.D., D.C.L., LL.D., M.P.
George A. Macmillan, Esq.
*Trustees.*
D. B. Monro, Esq., M.A., Provost of Oriel. Appointed by the University of Oxford.
Professor William Ridgeway, M.A. Appointed by the University of Cambridge.
Sidney Colvin, Esq., M.A. Appointed by the Hellenic Society.
Arthur J. Evans, Esq., LL.D., F.R.S.
Professor Ernest Gardner, M.A.
Professor Percy Gardner, Litt.D.
Miss Jane E. Harrison, D.Litt., LL.D.
F. Haverfield, Esq., M.A.
D. G. Hogarth, Esq., M.A.
J. Linton Myres, Esq., M.A.
Professor H. F. Pelham, M.A., President of Trinity College, Oxford.
F. C. Penrose, Esq., Litt.D., D.C.L., F.R.S.
Cecil Harcourt Smith, Esq., LL.D.
Professor J. S. Reid, Litt.D.
Professor Charles Waldstein, Litt.D.
Appointed by the Subscribers.

Walter Leaf, Esq., Litt.D., *Hon. Treasurer*, 6, Sussex Place, Regent's Park, N.W.
William Loring, Esq., M.A., *Hon. Secretary*, 2, Hare Court, Temple, E.C.

DIRECTOR 1901—1902.

R. Carr Bosanquet, Esq., M.A., Trinity College, Cambridge.

SHL
LONDON
WITHDRAWN

# TABLE OF CONTENTS.

| | | | PAGE |
|---|---|---|---|
| 1. | A. J. EVANS. | The Palace of Knossos (Plates I.–III.) | 1 |
| 2. | R. S. CONWAY. | The pre-Hellenic inscriptions of Praesos | 125 |
| 3. | H. R. HALL. | Keftiu and the Peoples of the Sea | 157 |
| 4. | F. W. HASLUCK. | Sculptures from Cyzicus (Plates IV.–VI.) | 190 |
| 5. | MARCUS N. TOD. | Some unpublished 'Catalogi Paterarum Argentearum' | 197 |
| 6. | R. C. BOSANQUET. | Excavations at Praesos. I. (Plates VII.–XII.) | 231 |
| 7. | E. S. FORSTER. | Praesos. The Terracottas (Plates XIII.–XIV.) | 271 |
| 8. | R. C. BOSANQUET. | Excavations at Petras | 282 |
| 9. | R. C. BOSANQUET. | Excavations at Palaikastro I. (Plates VIII. 2, XV.–XX.) | 286 |

Corrigenda . . . . . 316
Annual Meeting of Subscribers . . . . . 317
Income and Expenditure, 1901–1902 . . . . . 322
Donations and Subscriptions, 1901–1902 . . . . . 324
List of Subscribers . . . . . 326
Lists of Directors, Students, and Associates . . . . . 331
Methods of Work and Teaching . . . . . 336
Rules and Regulations of the British School at Athens . . . . . 337
Index . . . . . 341

# LIST OF PLATES.

I. Sketch Plan of the Palace of Knossos.
II. Ivory Figure and Head from Knossos.
III. Ivory Figure and Head from Knossos.
IV. Sculptures from Cyzicus, 1–2.
V. Sculptures from Cyzicus, 3–4.
VI. Sculptures from Cyzicus, 5–6.
VII. Praesos, Crete. General Map of Site.
VIII. (1) Praesos; Region of Megalithic Remains; (2) Palaikastro: Interior of House *B*.
IX. Praesos: Vases from Tomb *C*.
X. Praesos: Models of Armour from the Altar Hill.
XI. Praesos: Plan and Sections of Hellenistic House.
XII. Praesos: The Hellenistic House. (1) From the West; (2) From the East.
XIII. Praesos: Terracottas from the Altar Hill.
XIV. Praesos: Terracotta Lion from the Altar Hill.
XV. Palaikastro: Sketch Map of the Plain.
XVI. Palaikastro: The Plain from the South.
XVII. Palaikastro: 1–3, From the Early Cemetery; 4–5, From House *B*.
XVIII. Larnax from Palaikastro.
XIX. Larnax from Palaikastro.
XX. Palaikastro: Plan of House *B*.

# LIST OF ILLUSTRATIONS IN THE TEXT

The Palace of Knossos:—

PAGE

Fig. 1. View from Foot of Quadruple Staircase looking East along Portico of Hall of Colonnades . . . . . . . 2
Fig. 2. Plan of Northern Entrance and Portico . . . . . 5
Fig. 3. Northern Portico and Entrance Passage . . . . . . 7
Fig. 4. Projecting Oil-Spout in Upper Terrace Wall . . . . . 9
Fig. 5. Large *Pithoi* with Knob and Ropework Decoration . . . 11
Fig. 6. Grooved Blocks for Partitions . . . . . . . . 12
Fig. 7. Terracotta Drain-pipes . . . . . . . . . . 13
Fig. 8. Tablets of Porcelain Mosaic in Form of Houses and Towers . 15
Fig. 9. Porcelain Tablets in Form of Houses . . . . . . 17
Fig. 10. Porcelain Tablets showing Warriors, Animals, etc. . . . 21
Fig. 11. Small Vase of Porcelain and Gold . . . . . . . 25
Fig. 12. Gold Spray in Flat Bowl . . . . . . . . . 25
Fig. 13 *a*, *b*. Painted Jug . . . . . . . . . . 26, 27
Fig. 14. Painted Terracotta Pillars with Doves; Belonging to Early Shrine . . . . . . . . . . . . 29
Fig. 15. Portable Seat of Divinity in Painted Terracotta . . . 31
Fig. 16. View in Lower East-West Corridor (Looking E.) . . . 35
Fig. 17. View looking West from Upper East-West Corridor . . . 37
Fig. 18. Gold Pendant in Form of Duck . . . . . . . 39
Fig. 19. Cornelian Duck Bead . . . . . . . . . . 39
Fig. 20. Egyptian Duck Bead . . . . . . . . . . 39
Fig. 21. View in Hall of Double Axes showing Collapsed Window off Light Area . . . . . . . . . . . . 40
Fig. 22. View of Eastern Section of Hall of Double Axes showing E. and S. Porticoes . . . . . . . . . . . 43
Fig. 23. View from S.E. Corner of Queen's Megaron . . . . . 47
Fig. 24. Plan, Section, and Elevation of Raised Stylobate with Double Bench . . . . . . . . . . . . 49

THE PALACE OF KNOSSOS (*continued*) :—

PAGE
Fig. 25. Restored Section of Stylobate with Double Bench . . . 50
Fig. 26. Views and Section of Painted Relief showing Bird's Tail and Wings . . . . . . . . . . 52
Fig. 27. Plan and Sectional Elevation of Bath Room with Painted Spiral Frieze . . . . . . . . . 53
Fig. 28. Wall-Painting of Lady, apparently Dancing . . . . 55
Fig. 29. Ground Floor Plan of Domestic Quarter and Adjoining Halls . 56
Fig. 30. Upper Floor Do. Do. Do. 57
Fig. 31. View in Court of the Distaffs, showing Restored Framework of Window . . . . . . . . . . 64
Fig. 32. Distaff (?) signs from Pictographic Script and on Masonry Blocks . . . . . . . . . . 65
Fig. 33. Part of Painted Vessel with Inscription . . . . . 67
Fig. 34. Gold Heart-shaped Pendant . . . . . . . 69
Fig. 35. Decorative Attachment of Bronze, with Gold Plate attaching . 71
Fig. 36. Do. Do. Do. 71
Fig. 37. Part of Ivory Head, with Curling Lock of Bronze Plated with Gold . . . . . . . . . . 72
Fig. 38. Head of Ivory Figure, showing Holes for Attachment of Locks of Hair in Bronze and Gold . . . . . . 72
Fig. 39. Arm of Ivory Figure . . . . . . . . 74
Fig. 40. Seal Impression, showing Babylonian Influence . . . 77
Fig. 41. Seal Impression, Group of Warriors . . . . . . 77
Fig. 42. Seal Impression, Hand Grasping Lily Spray . . . . 78
Fig. 43. Seal Impression, Male Figure over back of Bull . . . 78
Fig. 44. Room of the Stone Bench, showing Upper Floor Pavement partly in Position and partly Reconstructed . . . 79
Fig. 45. Gold Fish . . . . . . . . . . 80
Fig. 46. Plan of Part of the Drains showing Position of Shafts *A*, *B* and *C* . . . . . . . . . . 82
Fig. 47. Section of Drain with Shafts *A* and *B* . . . . . 83
Fig. 48. Plan and Section of Latrine . . . . . . . 85
Fig. 49. False-Lipped Jar used as Covering of an Interment, with Skull . 88
Fig. 50. Vases from Plaster Closet of Earliest Period of Later Palace . 89
Fig. 51. Do. Do. Do. 91
Fig. 52. Painted Earthenware Candlestick from Plaster Closet . . 92
Fig. 53. Egyptian Clay Candlestick from Fourth Dynasty Tomb . . 93
Fig. 54. Types of Swords Incised on Tablets . . . . . 94

THE PALACE OF KNOSSOS (*continued*):—

PAGE
Fig. 55. Plan and Section of Shrine of the Double Axes . . . . 97
Fig. 56. Idols and Votary of Painted Terracotta from Shrine . . . 99
Fig. 57. Miniature Double Axe of Steatite from Shrine . . . . 101
Fig. 58. Miniature Double Axe of Bronze with Gold Plate attaching . 101
Fig. 59. Goddess with Double Axe on Steatite Lentoid . . . . 102
Fig. 60. Clay Seal Impression showing Double Axe between Horns of Bull . . . . . . . . . . . 102
Fig. 61. Clay Seal Impression with four Double Axes . . . . 103
Fig. 62. Wall Painting consisting of Labyrinth Pattern from Corridor E. of Hall of Double Axes . . . . . . . . 104
Fig. 63. Clay Sealing with Signet Impressions showing Design derived from Twelfth Dynasty Scarabs . . . . . . 106
Fig. 64. Clay Sealings with Pictographic Signs . . . . . 107
Fig. 65. Double Axe with Scale Pattern . . . . . . 107
Fig. 66. (*a*) Ink written Linear Inscription in Cup; and (*b*) Transcription of *a* in Normal Characters of the Linear Script . 108
Fig. 67. Plan of East Bastion with Section on Line *A—A* . . . 112
Fig. 68. Sections of East Bastion on Lines *B—B* and *C—C*. . . 113
Fig. 69. View of East Bastion and Remains Quadruple Lines of Walling behind it . . . . . . . . . . . 115
Fig. 70. Painted Cup of Metallic Outline; Middle Minoan . . . 120
Fig. 71. Cup with Water-lily design; Middle Minoan . . . . 120
Fig. 72. Fragment and Restored Section of Diorite Bowl, from Early Palace . . . . . . . . . . . . 121
Fig. 73. Section of Egyptian Diorite Bowl from Tomb of King Sneferu, of the Fourth Dynasty . . . . . . . . . 122
Fig. 74. Fragment and Restored Section of Liparite Bowl . . . 123

THE PRE-HELLENIC INSCRIPTIONS OF PRAESOS:—

The *Nomos*-Fragment . . . . . . . . . . 125
The *barxe*-Fragment: Photograph and Transcription . . 132

KEFTIU AND THE PEOPLES OF THE SEA:—

Fig. 1. Vase (*Trichter* type) from Tomb of Rekhmârā . . . . 171
Fig. 2. Warrior from Tomb of Rekhmârā . . . . . . 171
Fig. 3. Keftian carrying Vase (after Virey, Tombeau de Rekhmârā) . 171
Fig. 4–5. Silver Vases from Tomb of Senmut . . . . . 172
Fig. 6. Gold Vase inlaid with Copper; sketched in the Tomb of Senmut 172

KEFTIU AND THE PEOPLES OF THE SEA (*continued*):—

PAGE
Fig. 7. Gold and Silver Vase; sketched in the Tomb of Senmut . . . 173
Fig. 8. Copper or Bronze Vase; sketched in the Tomb of Senmut . . . 173
Fig. 9. A Philistine: *temp.* Rameses III. (Medînet Habu) . . . 185
Fig. 10. A Tchakaray: Do. Do. 185
Fig. 11. A Ship manned by Shardina and Philistines, attacked by the Egyptians. *Temp.* Rameses III. (Medînet Habu) . . 186
Fig. 12. Representations of Mycenaean (?) metal *Pithoi*: Tomb of Rameses III. *Circa* 1200–1150 B.C. . . . . . . 187
Fig. 13. Porcelain Ape, inscribed with Cartouche of Âmenḥetep II. . 188
Fig. 14–15. Porcelain Vase inscribed with Cartouche of Amenḥetep III. 189

EXCAVATIONS AT PRAESOS. I.:—

Fig. 1. The First Acropolis, from the South-East . . . . . 233
Fig. 2. Hand-made Mug from the Cave . . . . . . 235
Fig. 3. Fragment of Geometric Vase . . . . . . . . 235
Fig. 4. Vase Lid with Figure of Hare . . . . . . . 235
Fig. 5. Earthenware Pipes . . . . . . . . . . 236
Fig. 6. Rock-cut Winepress at Hagios Constantinos . . . . 237
Fig. 7. House at Hagios Constantinos . . . . . . . . 238
Fig. 8. Bee-hive Tomb at Praesos . . . . . . . . 241
Fig. 9. Geometric Jug from Bee-hive Tomb . . . . . . 242
Fig. 10. Geometric Cup Do. . . . . . . . 242
Fig. 11. Gold Ring with Granulated Work . . . . . . . 243
Fig. 12. Gold Rosette . . . . . . . . . . . 243
Fig. 13. Silver Pin from Bee-hive Tomb . . . . . . . 244
Fig. 14. Tomb *B* . . . . . . . . . . . . 246
Fig. 15. Restoration of Larnax from Praesos . . . . . . 247
Fig. 16. Gold Ring from Tomb *B* . . . . . . . . 248
Fig. 17. Gold Ornament from Tomb *B*. . . . . . . . 248
Fig. 18. Gold Bead . . . . . . . . . . . . 248
Fig. 19. Gold Ivy Leaf . . . . . . . . . . . 248
Fig. 20. Tomb *C*. . . . . . . . . . . . . 249
Fig. 21. Vases from Tomb *C* at Praesos . . . . . . . 250
Fig. 22. Clay Bead from Tomb *C*. . . . . . . . . 251
Fig. 23. Mycenaean Tomb on the First Acropolis . . . . . 252
Fig. 24. Remains of Hellenistic Houses on the First Acropolis . . 253
Fig. 25. Mycenaean Gem from Tomb *D* . . . . . . . 252

EXCAVATIONS AT PRAESOS. I. (*continued*) :—

PAGE
Fig. 26. Tomb *E* . . . . . . . . . . . . 254
Fig. 27. Walls Excavated on the Altar-Hill . . . . . . 255
Fig. 28. Covertile, Almond Tree Site . . . . . . . 261
Fig. 29. Stone Water Spout, Almond Tree Site, and Section . . 262
Fig. 30. Architectural Details, Praesos . . . . . . 263
Fig. 31. Oil-Press in Room 4 . . . . . . . . 265
Fig. 32. Do. Do. Section of Wall and Press-Bed . . 266
Fig. 33. Athenian Vase with Scene of Oil-Pressing . . . . 266
Fig. 34. Plan and Section of Older Press-Bed . . . . . 267
Fig. 35. Oil-Separator from House at Praesos . . . . . 268
Fig. 36. Oil-Separator : Sketch of Handle . . . . . . 268

PRAESOS : THE TERRACOTTAS :—

Fig. 1. Fragment of a Terracotta Male Figure from Piskokephalo . 274
Fig. 2. Terracotta Figure from Praesos . . . . . . 276
Fig. 3. Terracotta Figure from Praesos . . . . . . 276
Fig. 4. Painted Terracotta Lion from Praesos . . . . . 277
Fig. 5. Upper Part of Female Figure from Praesos . . . . 279
Fig. 6. Base of a Terracotta Female Figure from Praesos . . . 279
Fig. 7. Do. Do. Do. 279

EXCAVATIONS AT PETRAS :—

Fig. 1. Petras near Sitia . . . . . . . . . . 283
Fig. 2. Kamáres Jar from Petras . . . . . . . . 284
Fig. 3. Spherical Vase from Petras . . . . . . . . 284
Fig. 4. Mycenaean Lamp from Petras . . . . . . . 285
Fig. 5. Vase with Internal Cells from Petras . . . . . . 285

EXCAVATIONS AT PALAIKASTRO. I :—

Fig. 1. The Eastern Half of Crete . . . . . . . . 287
Fig. 2. Bowl from Kastri . . . . . . . . . . 289
Fig. 3. Hand-Made Vase with Impressed Triangles . . . . 290
Fig. 4. Beaked Jug . . . . . . . . . . . 290
Fig. 5. Bone-enclosure of the Kamáres Period . . . . . 291
Fig. 6. Detail of Kamáres Bone-Enclosure . . . . . . 292
Fig. 7. Types of Pottery from the Bone-Enclosure . . . . 293
Fig. 8. Group of Five Vases, as found . . . . . . 294

EXCAVATIONS AT PALAIKASTRO. I. (*continued*) :—

PAGE
Fig. 9–12. Kamáres Vases from the Bone-Enclosure . . . . . 295
Fig. 13. Ivory Disc . . . . . . . . . . . 296
Fig. 14. Black Steatite Prism . . . . . . . . . 297
Fig. 15. Larnax with sunk Panels, from Palaikastro . . . . 298
Fig. 16. Position of Larnakes in River-Bank . . . . . . 301
Fig. 17. Larnax-Burial on the Cliff . . . . . . . . 301
Fig. 18. Engraved Cylinder from Larnax-Burial . . . . . . 302
Fig. 19. Pseudamphora from Upper Deposit in Bee-Hive Tomb . . 303
Fig. 20. Bee-Hive Tomb, Plan, Section, and Detail-Plan showing Arrangement of Lower Deposit . . . . . . . . 304
Fig. 21. House *A*, Palaikastro . . . . . . . . . 307
Fig. 22. Forms of Pottery found in Houses *A* and *B*, Palaikastro . . 309
Fig. 23. House *B*, Plan of the Main House . . . . . . . 310
Fig. 24. Sections through House *B* . . . . . . . . 311
Fig. 25. Bath-Room of House *B* . . . . . . . . . 312
Fig. 26. Pseudamphora found in the Bath-Room . . . . . . 313
Fig. 27. Stucco Horns . . . . . . . . . . . 314

# THE PALACE OF KNOSSOS.

## *Provisional Report of the Excavations for the Year* 1902.

(PLATES I.—III.)

### § 1.—THE CAMPAIGN OF 1902.

AS far as it was possible to forecast the Campaign of 1902 on the Palace site of Knossos it promised to be one of finishing up in a limited quarter of the East Slope, with some further delimitation of already fairly ascertained boundaries. But appearances were deceptive. Not only did the work of excavating the remainder of the deep-lying rooms of the Central part of this quarter prove to be of extraordinary difficulty, owing to the masses of heavy superstructures that it was necessary to support, but the building was found to extend further down the slope than the preliminary trial pits had led us to expect. In several cases these had just missed important walls, with the result that vast masses of excavated materials had, towards the close of the previous campaign, been dumped down in places from which they had this year to be removed at the cost of much labour. It was also found that several of the chambers previously excavated along the edge of the second East Slope Terrace—notably those near the Olive Press—overlaid basement areas containing important remains, and these, in turn, the floor levels of a still earlier Palace, covered with pottery of the pure 'Kamáres' class. On the lower Terrace again were brought to light whole ranges of rooms and magazines belonging to this more primitive system and containing what are probably the finest existing specimens of the 'Middle-Minôan' ceramic class.

The work began on February 12, and continued in full swing till the end of June. The extensive character of the operations may be judged from the fact that during a good deal of this time as many as 250 workmen were employed. The arduous labour of propping up walls, raising sunken blocks, supporting upper floor-levels (see Fig. 1), and reconstructing fallen masses of pavement necessitated the constant services of over a score of carpenters and masons. The purchase and transport of the timber, brick, iron, and other materials required for this work also entailed a serious expenditure. The conservation of such unexampled remains of upper stories existing *in situ* seemed, however, to be a first duty of the excavator and it may at least be said that no labour or expense has been spared to preserve this evidence. The result has been that throughout the whole central area of the Eastern quarter of the Palace the upper rooms, with their door-blocks, pillar-bases, and large parts even of their pavements, have been firmly secured in their original position.

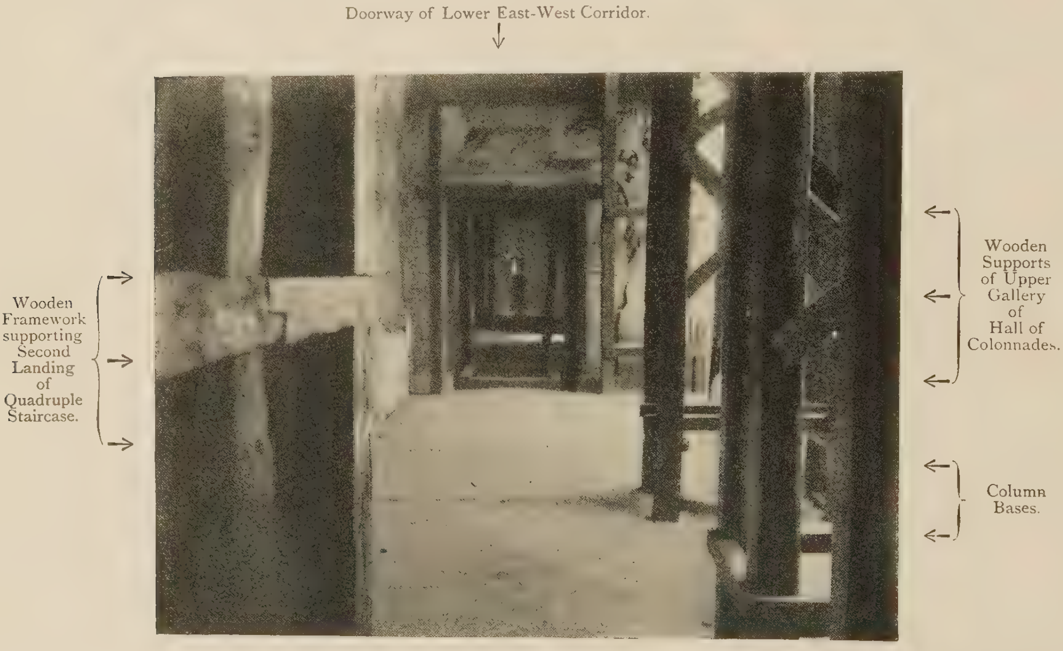

Doorway of Lower East-West Corridor.
Wooden Framework supporting Second Landing of Quadruple Staircase.
Wooden Supports of Upper Gallery of Hall of Colonnades.
Column Bases.

Fig. 1.—View from Foot of Quadruple Staircase looking East along Portico of Hall of Colonnades.

*Pari passu* with the opening up of new ground the work of testing and revision was continued in the parts of the site already excavated. Such re-examination has necessarily entailed a certain amount of rectification in plans and conclusions set forth in preceding Reports, a fact which may serve to emphasize the provisional character of the summary accounts given in these pages of successive season's works. In the quarter about the Northern Entrance, particularly, further investigations and the removal of what proved to be later walls have led to altogether new developments, including the discovery of a spacious outer portico.

In directing the works I had, as before, the valued assistance of Dr. Duncan Mackenzie, who is also engaged on a special study of the pottery found in the Palace.[1] I was also fortunate in again securing the services of Mr. Theodore Fyfe for the architectural plans and necessary works of conservation, and he has at my request communicated a paper on the decorative frescoes and architectural reliefs to the Royal Institute of British Architects.[2] The practical work, especially that of raising and supporting large blocks, was also much aided by the presence this year as foreman of the works of Gregorios Antoniou, so well known for his most capable exercise of similar functions for a succession of British excavations in Cyprus as well as for Mr. Hogarth in the Dictaean Cave and at Zakro.

## § 2.—SUPPLEMENTARY DISCOVERIES IN THE NORTHERN PALACE REGION: ENTRANCE PORTICO AND EXTERNAL PILLAR-HALL.

In the exceptionally massive square of constructions that lie to right of the Northern Entrance passage as approached from without, between the North Piazza and the Central Court, further researches and excavations did much to bring out the original lines of the building which had been greatly obscured by later walls. The plan as thus recovered was really much simpler. The double door from the North Piazza was found to give access to a kind of oblong atrium, the back part of which must have been connected to the right with an ascending stepped corridor that leads South to the Corridor of the Stone Basin. A direct and convenient line of communication would thus have been provided between the antechamber of the Throne Room and the North-West corner of the Central Court on the one side and the North Piazza and adjoining Bath system on the other. (See Sketch Plan, Pl. I.)

The square enclosed between the upper part of this connecting passage and the Northern Entrance way was divided into three elongated ground floor rooms, with floor levels a little below the level of the Central

---

[1] To appear in the forthcoming number of the *Journal of Hellenic Studies*.

[2] 'Painted plaster decoration at Knossos,' *Journal of the R. Inst. of British Architects*, Third Series, Vol. X. (No. 4), p. 107 *seqq*. Mr. Fyfe has executed the Architectural Plans in this Report.

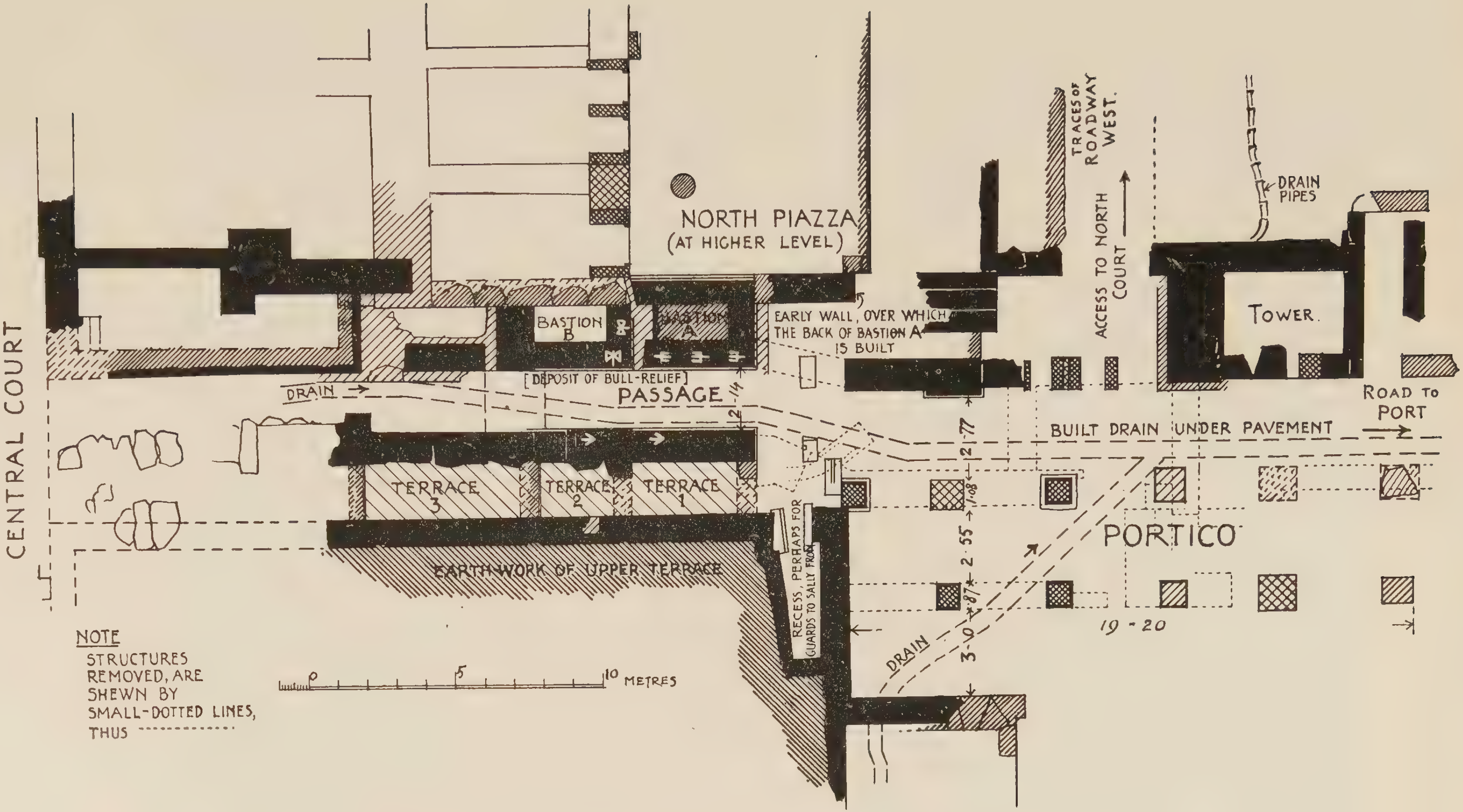
Court. These rooms, as the important remains of wall-paintings found above their floors sufficiently indicate, had originally supported a fine upper hall to which unquestionably belonged the miniature and other frescoes found here above the lower floors. The three ground-floor rooms in question had, as already shown, been subsequently re-occupied with slightly raised floor levels, during the mature Mycenaean Period, and a good deal remodelled. The Westernmost of the original three chambers had in this way been broken up into two smaller rooms belonging to this Period of Re-occupation, in one of which the stirrup-vases were found.

Each of the three elongated chambers mentioned above has at its Northern end one of the deep, walled pits described in the last Report, resembling the 'oubliettes' of a mediaeval castle, and which probably served as dungeons. This makes it probable that the chambers connected with these were occupied by guards and warders.

The removal of some later walling, consisting of older materials re-used in a promiscuous manner, on the East side of the lower part of the Northern entrance brought to light the lower blocks and bases of five massive square pillars which were seen to form part of a system. Further excavation Northwards resulted in the uncovering of several more bases and finally revealed the plan of a Portico consisting of twelve pillars. Of the South-Easternmost of these all traces had vanished and only the foundation socket was visible of the last but one to the North-West, but the arrangement and regular espacement of the pillars was otherwise quite clear. (See Plan, Fig. 2, and Fig. 3.)

This Portico, consisting thus of a double row of six pillars, flanked the roadway running North from the entrance passage for a distance of about twenty metres. At the same time its central opening faced the remains of what seems to have been a double gateway from which the traces of another paved road ran West. The Portico thus stood at the chief point of access to the Palace both from the City and the Sea-port. The square pillars as far as they were preserved consisted of gypsum blocks ·85 cm. × ·85 and 1·05 in height resting on larger bases and placed at intervals of 2·65 metres (Fig. 3).

Opposite the Northern part of the Portico and dominating the meeting point of the two roads are massive remains of what appears to have been a tower or guard-house, and, facing this, a massive bastion. Indeed, as already noticed in the first Report, there is every evidence that the



CENTRAL COURT
NORTH PIAZZA (AT HIGHER LEVEL)
BASTION B
BASTION A
EARLY WALL, OVER WHICH THE BACK OF BASTION A IS BUILT
[DEPOSIT OF BULL-RELIEF]
DRAIN
PASSAGE
2·14
TERRACE 3
TERRACE 2
TERRACE 1
EARTH-WORK OF UPPER TERRACE
RECESS, PERHAPS FOR GUARDS TO SALLY FROM
TRACES OF ROADWAY WEST.
ACCESS TO NORTH COURT
DRAIN PIPES
TOWER.
ROAD TO PORT
BUILT DRAIN UNDER PAVEMENT
2·77
1·08
2·55
·87
3·0
PORTICO
19·20
DRAIN
NOTE
STRUCTURES REMOVED, ARE SHEWN BY SMALL-DOTTED LINES, THUS
0
5
10 METRES

Fig. 2.—Plan of Northern Entrance and Portico.

Northern entrance to the Palace, which must have been the chief avenue of public access, was jealously guarded.

Further North all remains of the Palace proper cease and the roadway itself with its accompanying main-drain also breaks off. At a distance however of about twenty-five metres North of the Portico was found the basement of an important building which from its position seems to stand in some relation to the Palace. The Southern wall-line of this building lies in fact at the point at which the Northern roadway if prolonged would be intersected by the small paved causeway that runs, pointing in this direction, past the North-Westernmost angle of the Palace. The main part of this building is a room, about 5·30 by 8 metres, in which at a distance of 1·62 metre from the North wall stood two pillars consisting of tall gypsum blocks. One of these was 50 cm. square with bevelled edges and 1·52 metre in height. It was standing *in situ*, the upper part of the pillar being visible in the floor of a modern threshing-floor. The other pillar, shaped like the first, was found in a half-fallen position and proved to be 2 metres in height, though much corroded. These pillars stood on square limestone bases with an interval of 1·10 metre between them.

That this pillar-hall was a basement structure appears probable from the fact that the outer stones of the walls show a rough face. The North and East walls were of exceptionally large limestone blocks—one 1·72 m. in length by 0·64 in height. Of the South wall only a fragment remained. The West wall consists of two courses each about 50 cm. high with a plinth below. It is constructed of more finely cut blocks, like some of the best Mycenaean work of the Palace. Several fallen blocks of the same kind evidently belonging to the upper storey showed the trident mark so characteristic of the great bastion of the North Entrance of the Palace. In one case this was combined with the star.

As a whole, however, the construction of this isolated building differs from that usual in the Palace itself. That the walls should be constructed wholly of masonry was itself an exceptional phenomenon. In the door openings, on either side there were none of the regular jambs. The pillars, formed of single blocks, resembled one or two found in the earlier structures, associated with fine 'Kamáres' pottery, on the South-East slope. It may be supposed that here, as in the case of the Pillar Rooms of the Palace, these basement pillars formed the supports of a pair of columns in an upper hall.

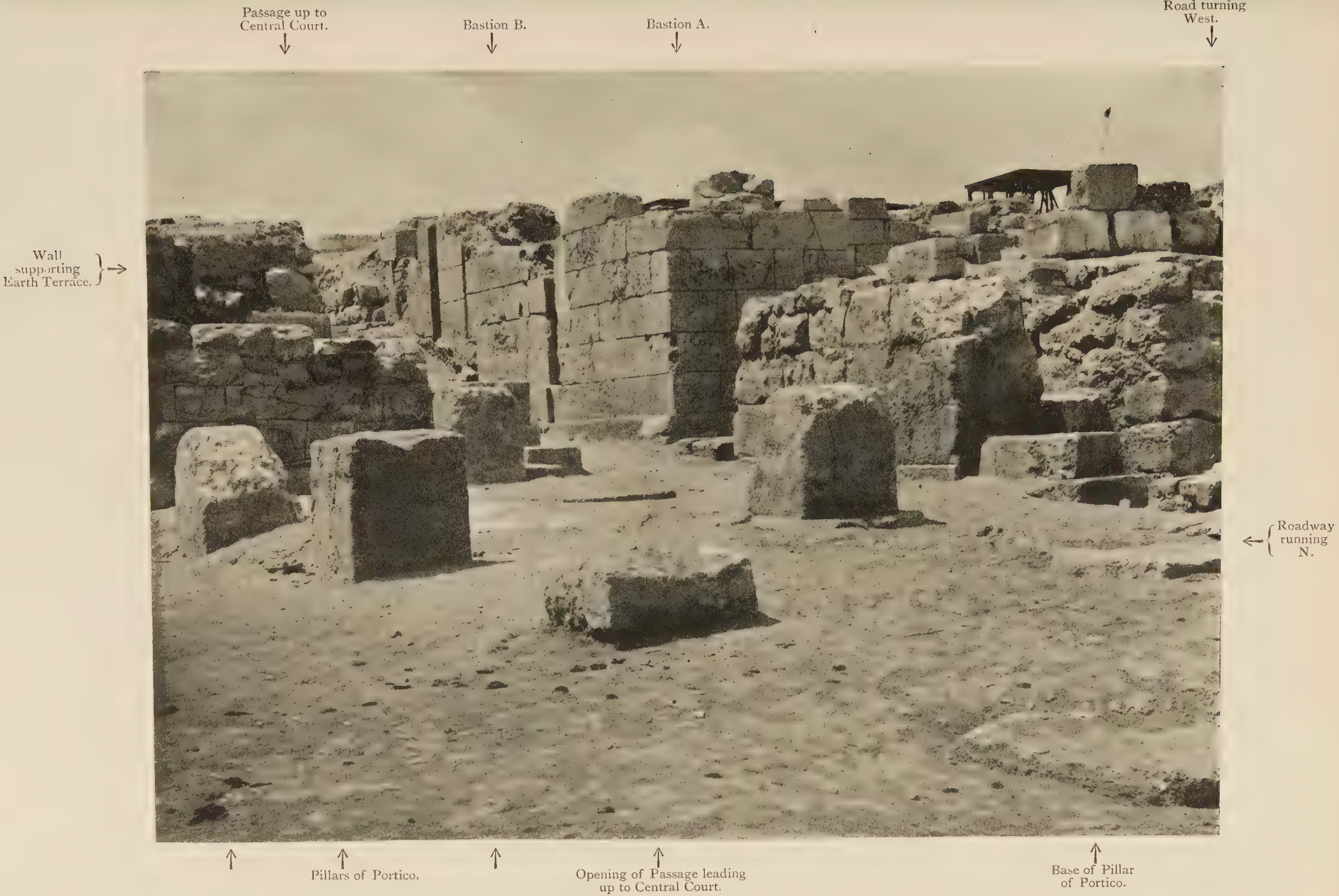

Passage up to Central Court.
Bastion B.
Bastion A.
Road turning West.
Wall supporting Earth Terrace.
Roadway running N.
Pillars of Portico.
Opening of Passage leading up to Central Court.
Base of Pillar of Portico.

FIG. 3.—NORTHERN PORTICO AND ENTRANCE PASSAGE.

On the floor level of this room, formed of stamped clay,[1] was a stratum of burnt wood and a good deal of rough mature Mycenaean pottery was here found, together with some fragments of Geometrical ware. About 10 metres due North of the North wall of the chamber and centering with it, a well was discovered, the bottom of which was finally reached at a depth of 15·50 metres. This well also contained throughout potsherds belonging to the same two classes. A little East of this spot were found what seemed to be the remains of an oven-shaped tomb containing broken vases of the same Geometrical class as that found in the well and Pillar Hall.

The occurrence in this area of Geometrical pottery seems to show that this Pillar Hall and its dependencies, though of earlier origin, had continued to be occupied in post-Mycenaean times. It thus presents a striking contrast to the Palace proper, where traces of the Geometrical Period have been throughout conspicuous by their absence. 'Geometrical' tombs, some of which were explored by Mr. Hogarth,[2] occur on the hills that overlook the later Greek and Roman town of Knossos to the North.

## § 3.—DEVELOPMENT OF THE OLIVE PRESS SYSTEM: THE COURT OF THE OIL SPOUT AND ADJOINING MAGAZINES OF THE KNOBBED *PITHOI*.

The further investigation of the area in the neighbourhood of the Room of the Olive Press and of the adjoining lower terrace led to a series of discoveries which bring the whole of this region into systematic relation and show that they were devoted to the manufacture and storage of oil.

Additional sections of the stone duct or runnel leading from the oil-vat were brought to light, proceeding by an angular course along the adjoining wall-tops towards the curious spout of gargoyle-like aspect that had been found projecting from the outer side of the Upper East Terrace wall (Fig. 4).[3] It thus appears that this stone spout was not, as had been at first supposed, connected with a rain-water gutter, but was devised as means for pouring the oil derived from the press above into tall earthenware recipients.

A completer examination of the area, here overlooked by the terrace wall, showed that it was originally surrounded by good walls of limestone and gypsum such as elsewhere in the Palace form the face of small courts and light-wells and that it had therefore never had an upper storey. The deposit of wall-paintings found here with the scenes exhibiting the female toreadors must have been derived from a room or gallery above the terrace wall with the spout.

---

[1] Between the two pillars however was a deposit which does not seem to be flooring.

[2] See *Annual*, vi. (1899–1900), p. 83.

[3] See *Annual*, 1900–1901, p. 94.

This open area, to which the name of the Court of the Oil Spout may appropriately be given, would naturally have been devoted to filling various vessels with oil. It is probable that the short break in the course of the oil-duct that is visible on the upper side of the terrace wall was occupied by a settling vat or vats, where the impurities of the fluid and its coarser portion were allowed to settle on a bed of water that could be raised or lowered in the manner usual in such reservoirs. Immediately on one side of the place where such a vat would naturally have stood there are in fact remains of a well, suggestive of the need of a water supply. The oil conduit itself showed a curious variation in different parts of its course. At the point where it emerges from the press it is 43 cm. wide and 9 deep, while at the end nearer the spout it is 21 cm. in width and 14 in depth, the depth thus increasing as the width decreases. It is probable that the channel was originally lined with cement to prevent leakage at the numerous joints between the limestone blocks in which it is cut, and this

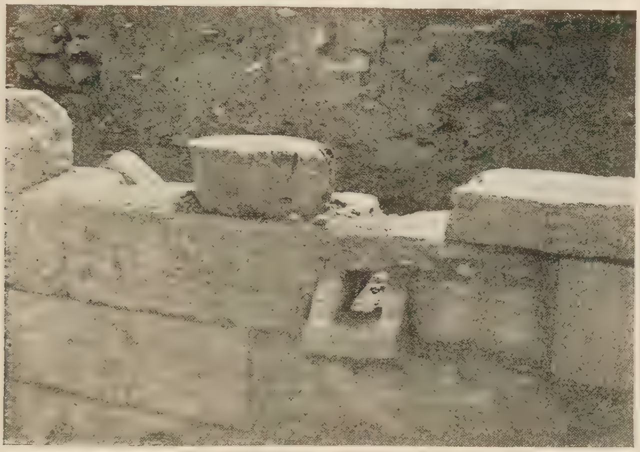


FIG. 4.—PROJECTING OIL-SPOUT IN UPPER EAST TERRACE WALL.

may account for the fact that its present dimensions seem unnecessarily capacious for an oil duct.

The West or Terrace Wall of the Court of the Oil Spout is formed of three courses of fine limestone blocks of an average length of 1·50 m. and height of 50, resting on a projecting plinth below. These blocks show the trident sign, sometimes two on the same block. The South Wall of the Court contains similar limestone blocks (without signs) above a plinth; it is broken by a doorway leading to the 'School Room.' The North Wall of the small Court was of gypsum, two blocks of the lower course only remaining, surmounted by another, 1·34 wide by 1·24 high. It is possible that the Court was open to the East and that the remains of limestone walling here represent another terrace edge. In the middle of the Court was a blind well with traces of a drain leading into it.

The direct relation of the Court of the Oil Spout with the Olive Press above sufficiently explained the character of the chambers found to the East and North of it. On the removal of the great shoot from the previous excavations which had obscured this part of the site a series of magazines containing *pithoi* were brought to light. The jar found in the space immediately East of the Court was of ordinary dimensions, but in the area to the North three magazines were traceable containing *pithoi* larger than any yet discovered. It seems probable that these great jars were filled with oil *in situ* by means of ducts from the oil-spout or by a branch of the stone conduit on the terrace above, of which traces have now disappeared.

Besides their exceptional size the decoration of these *pithoi* differs in several respects from that of any hitherto found. Their rims had in all cases suffered from too great proximity to the surface, but the bodies of the jars were surrounded by tiers of upright handles placed at unusually close intervals (Fig. 5 *a* and *b*). Fourfold lines of raised ropework arranged horizontally divided the surface into zones, and these were connected by a succession of triple cross-lines of the same kind. The whole thus presented the appearance of large jars bound round by a kind of rope network very realistically reproduced and arranged in a manner suggestive of the means by which they were actually transported from the place of manufacture.

The most characteristic feature, however, of these great jars is supplied by the best preserved of them, where the inter-spaces between the handles and rope-work are decorated with groups of knobs like the studs of metal-work (Fig. 5 *b*). This knobbed decoration is of special interest as it enables us to group this class of *pithoi* with the vases studded over in a similar manner found in the Corridor of the Bays.[1] These vases, like so many of the earlier Minôan class, betray in their embossed relief and other particulars a distinct indebtedness to prototypes in metal-work, and it is reasonable to suppose that the stud ornament was in this case taken over from the same source. The knobbed decoration may in turn have been transferred to *pithoi* from the example of the smaller vessels. In any case the parallelism in decoration must be taken as an evidence of contemporaneity and the knobbed *pithoi*, like the vases, must belong to a comparatively early period in the history of the existing Palace.

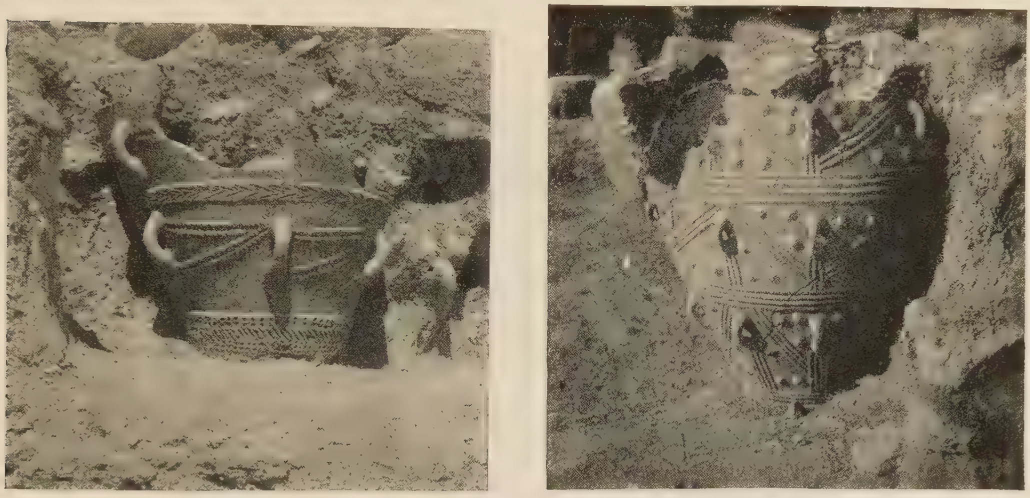

*a.* *b.*

FIG. 5.—LARGE *Pithoi* WITH KNOB AND ROPEWORK DECORATION.

Of the three Magazines containing the knobbed *pithoi* the Westernmost, containing remains of three jars, was 5·18 by 2·94 m. in dimensions with a floor level about 2·50 m. below the terrace level immediately above it. It opens into another Magazine of the same length but only 2·10 m. wide containing two more jars, and that in turn into a third store room with a floor-level 1·80 m. below that of the two other Magazines, but of which only parts of the wall-lines are preserved. The best preserved *pithos*, Fig. 5 *b*, stands in this chamber. Between these Magazines and the Court of the Oil Spout an ascending Corridor 1·60 wide, the steps of which however have disappeared, runs from East to West.

---

[1] *B.S. Annual*, 1900–1901, pp. 85, 86: Fig. 26, 28.

## § 4.—THE "PENS" OF THE UPPER EASTERN TERRACE.

About five metres West of the Magazines of the Knobbed *Pithoi* is the low terrace wall with interrupted upper courses broken by elongated grooved slabs referred to in the previous Report.[1] A further examination, however, has brought out the fact that these grooved slabs, of which six are preserved, were not, as at first supposed, runnels akin to those of the oil-press. The grooves in fact, though open on the outer face of the wall, run in 1·50 m. to square endings. It is obvious moreover from the dowel holes at either end of these elongated grooved blocks that they supported, both in front and at their further extremity, some kind of wooden framework (Fig. 6). It seems therefore possible that the grooves themselves were for sliding wooden partitions by means of which the space above the terrace wall was divided into compartments. What was the purpose of these can only be a matter for conjecture. Their width is only about two and

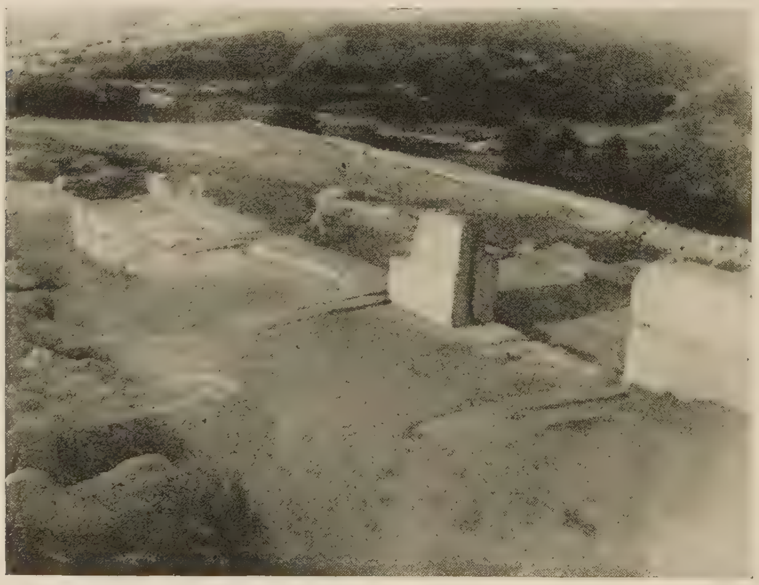


FIG. 6.—GROOVED BLOCKS FOR PARTITIONS.

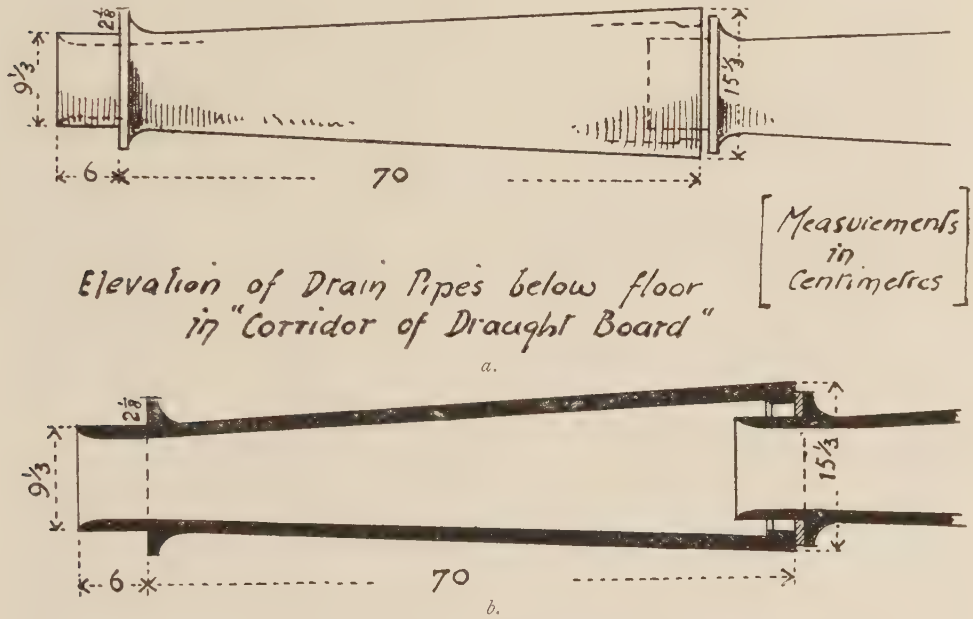
---

[1] *B.S. Annual*, 1900–1901, p. 93.

a half metres and their probable depth about the same, which makes them too small for stables, but they may have been pens for some kind of live-stock, or possibly kennels.

## § 5.—THE TERRACOTTA DRAIN-PIPES BENEATH THE FLOOR OF THE CORRIDOR OF THE DRAUGHT BOARD.

The removal for purposes of investigation of some slabs of the flooring upon which the Royal Gaming Board had rested, resulted in an interesting discovery. Immediately below the flooring at this point, 1·45 m. down, was found a terracotta drain of remarkable construction. (Fig. 7 *a* and *b*.) The drain, of which two sections were found at this point, running North-East was broken off at its Southern end by a later wall-foundation, immediately beyond which, however, its course was again struck and three more tubes were found in position socketed into one another. The circumstances of the find show that these drain pipes are at least anterior to the good pavement of Mycenaean date on which the


2·8
9⅓
15⅓
6
70
Measurements in Centimetres
Elevation of Drain Pipes below floor in "Corridor of Draught Board"
2·8
9⅓
15⅓
6
70

*a.*

*b.*

FIG. 7.—TERRACOTTA DRAIN-PIPES.

Gaming Board had rested and that they in all probability go back to the earliest period of the Later Palace.

This indubitable evidence of their great antiquity makes the extraordinarily advanced construction of these terracotta pipes the more remarkable. It will be seen from Fig. 7 *a* and *b* that the mouthpiece of each tube is provided with a stop-ridge, solidly backed behind, which when fixed against the butt end of the succeeding tube afforded effectual resistance against pressure that would otherwise have been likely to wedge the two together to splitting point. On the other hand the inside of the butt end of each is provided with a raised collar which offered a widened surface to the stop-ridge of the tube with which it was connected and at the same time supplied an additional hold for the cement that attached the butt end of the one to the mouthpiece of the other.

The tubes are 76 cm. in length with a diameter of 13⅓ cm. at the butt end, and 9½ at the mouth. Smaller clay pipes of simple fabric, the tubes of which, though socketed into one another, were not provided with stop-ridges, occurred in other parts of the Palace area, namely in a room near the South Propylaea, outside the Northern Tower, and in the Court of the Sanctuary to be described below. On the other hand jointed clay pipes with stop-ridges of very similar construction have been found by Dr. Dörpfeld on an early site explored by him in Leukas.

## § 6.—REMAINS OF PORCELAIN MOSAIC SHOWING HOUSES OF MINÔAN CITY AND OTHER SUBJECTS.

Immediately North of the basement area in which the remains of the large spiral fresco were found in 1901, another basement chamber was opened out which proved to contain relics of extraordinary interest. The West end of this cellar was partly covered by the slabs of a pavement upon which rested some plain tripod vases like others found in the North-East Magazines. From a depth of about a metre onwards beneath this floor level were found a series of enamelled plaques which had evidently belonged to a considerable mosaic—the material resembling Egyptian porcelain but of the native Knossian fabric.[1]

---

[1] In this space or on its borders were also found what appear to be large draught-men of ivory, 73 to 82 millimetres in height and 80 to 82 in diameter, and almost exactly answering to the diameter of the circles of the Gaming Table. One type has engraved below a disk surrounded by sixteen rays. Another type shows eight small engraved circles forming a ring. That these actually represent the pieces belonging to the board found only a few metres off, is highly probable.

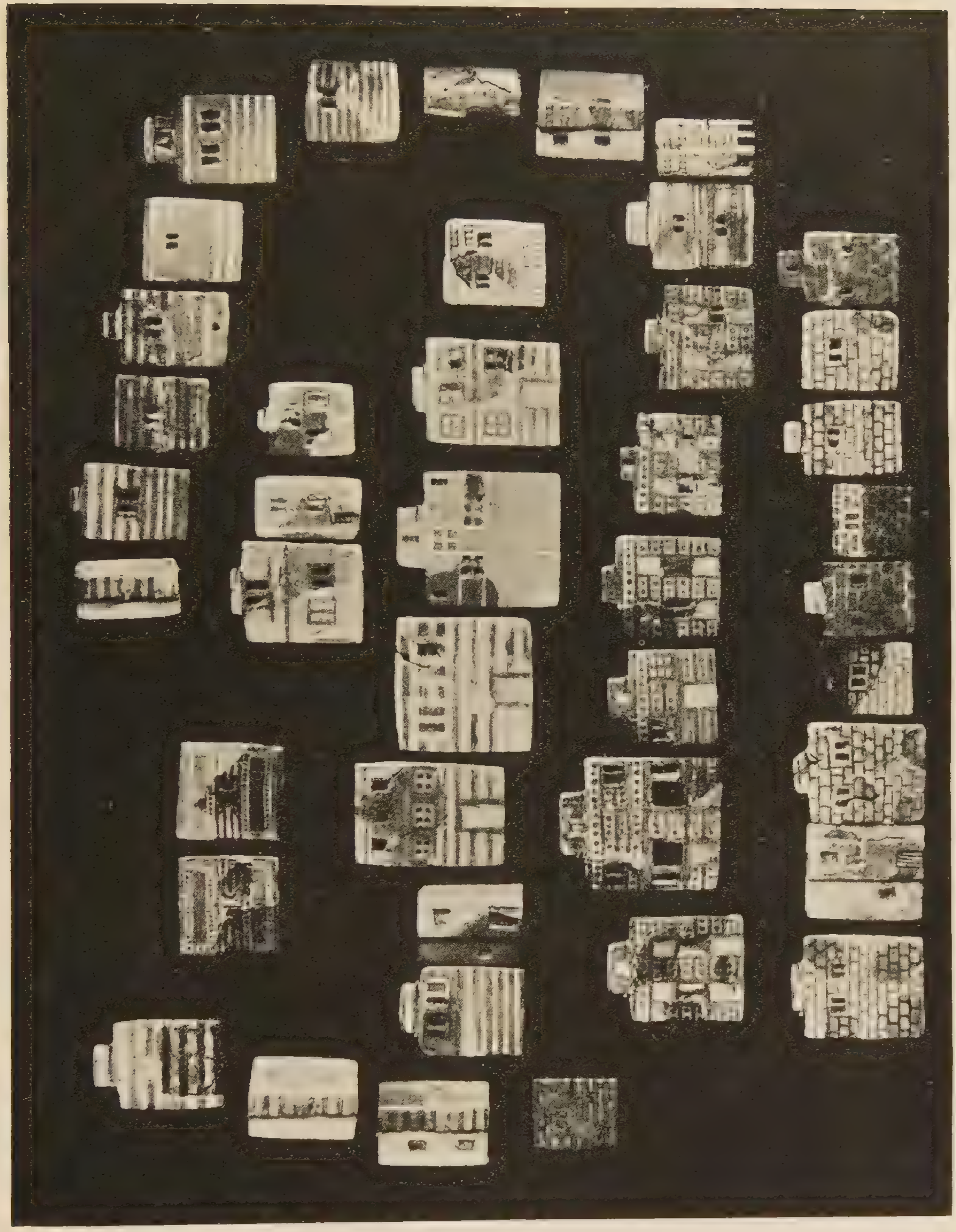


FIG. 8.—TABLETS OF PORCELAIN MOSAIC IN FORM OF HOUSES AND TOWERS.

A large number of these porcelain plaques were found to represent houses, towers and other buildings. Owing to the friable nature of the material, and the fact that they had evidently fallen from a room above, the plaques were in a much broken condition. In many cases, however, enough remained to supply a sufficient idea of the whole, and it was possible to reconstitute over forty examples of these façades. Fig. 8, from a photograph, gives a view of a series of these as thus reconstituted by me; certain recurring features in the design making it possible in some cases to complete the construction from comparatively fragmentary evidence. The arrangement as seen in Fig. 8 is an arbitrary one—the guiding principle having been to keep the buildings resembling towers and fortifications in the outer ring.

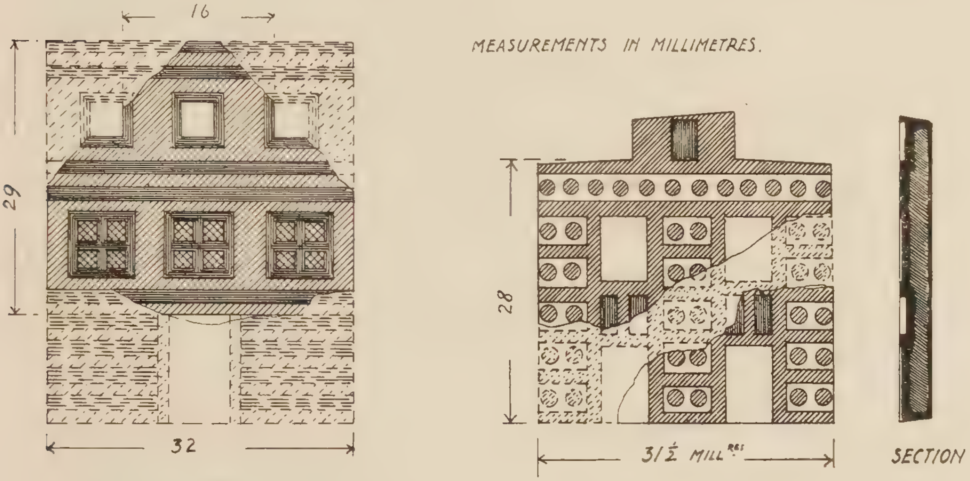
In order to make it quite clear what part of these reconstructed tablets represents the original fabric, special drawings have been made of characteristic examples by Mr. Fyfe, under my direction, and of these, two typical specimens of houses are given in Fig. 9 *a* and *b*. In a summary Report like the present it is impossible to deal more fully with this extraordinary architectural material.

Fig. 9 *b* represents a class of façade of which several fairly complete examples exist, so that every detail is thoroughly authenticated. The original of this type was obviously of wood and plaster construction, in which the round beam ends in the timbered compartments form a characteristic feature. It will be seen that many of these were quite short, simply laid across the thickness of the wall, a system of construction so ingrained at Knossos that in the great halls of the Palace, as will be shown below, beam courses of this kind are actually found interrupting the stone-work.

On the ground floor are what appear to be two doors, divided by a central panel—an arrangement superficially suggestive of modern semi-detached villas. Above the doors are two double windows filled with bright red pigment, above that again two larger window openings, and finally, what looks like an attic, with a small single window also coloured red. We have here a house or pair of houses with at least three stories.

The façade given in Fig. 9 *a* shows a different structure. The round beam ends are here wanting, and we see horizontal beams, with intervals of what seems to have been plaster-faced rubble. This house has a single door below, and, opening from the first floor, a row of three four-paned windows, coloured red like the others, set in a timber framework, while the uppermost floor is provided with three smaller windows which show no traces of coloured filling and seem to have been simple openings.

In one case we see two rows of four-paned windows, in another double windows of six panes. In two examples a very curious form of double-window appears, curving in, crescent fashion, on the outer sides. The more tower-like houses show no door below, but sometimes a small attic-like structure above with a small window. Some of these tower-houses, which probably represent outer bulwarks of the town, are constructed of horizontal beams with interspaces of rubble masonry and plaster, like so much of the Palace fabric, while others are of isodomic masonry. Of towers proper there are several varieties, among them a type with a door below, constructed of what appear to be massive upright beams, and greatly resembling a gate visible in the outer wall of the besieged city seen on the silver vase fragment from Mycenae.



DARK GREY GROUND, WITH
CRIMSON STRIPES & WINDOW FRAMES
UPPER WINDOWS OPEN RIGHT THROUGH
LOWER WINDOWS, SUNK, WITH SCARLET FILLING
*a.*

ALL GREY & WHITE.
WINDOWS, SUNK, WITH SCARLET FILLING
*b.*

FIG. 9.—PORCELAIN TABLETS IN FORM OF HOUSES (SLIGHTLY ENLARGED).

The upper, door-like openings, which in certain cases occur above rooms with regular windows, recall a feature repeated in some of the miniature wall-paintings. In these, groups of ladies are seen standing in similar openings, as upon a balcony. In other cases the women seem to be seated at open windows of a more usual type, and in one instance there is visible a part of a curtain, apparently of light material, perhaps drawn at night as a protection against mosquitoes.

The red pigment in the windows of the mosaic suggests that some substitute for window-glass was in use—perhaps oiled and scarlet-tinted parchment. In the Eastern Quarter of the Palace there will be repeated occasion to notice in the walls of the small courts and light-wells the existence of window openings with the dowel holes for the wooden framework. But that windows of such a modern aspect as these before us should have existed in Minôan Knossos is a phenomenon for which no analogy of classical civilisation could have prepared us.

Unexpected indeed as have been so many of the revelations of this early Cretan culture, the whole appearance of these house façades with their three and even four stories is perhaps the most astonishing. In view of the generally grandiose character of the Palace itself, the indications of upper stories appear natural enough. But in the houses of the mosaic we can hardly fail to recognise the dwellings of the ordinary Minôan citizens. That these should have attained the tall proportions of the houses of a modern street-front points surely back to long previous generations of civic life.

The original physiognomy of these houses is undeniable. Yet the question naturally arises whether there was not here, as in so many other aspects of early Cretan civilisation, an ultimate indebtedness to Egyptian models? As a matter of fact the fundamental elements in these house fronts as illustrated by the typical variety shown in Fig. 9 *b*, do correspond in a remarkable manner with those of the better class of Egyptian houses. On monuments of the XVIIIth Dynasty the evidence is to be found of a well-marked type of house with a lower storey in which, as a rule, three doors are seen side by side, a kind of *entresol* with windows, barred, or with open panels, and an upper storey with an open colonnade in front. These features it will be seen all reappear in the Knossian houses. The room below has often a pair of doorways, though, perhaps owing to the greater inclemency of the climate, there is a greater tendency to reduce these to one. Here again is a first floor with windows, though probably, for the same reason, oiled parchment, anticipating glass, may in this case have filled the panels. The door-like openings of the upper storey, in turn, correspond with the open gallery of the Egyptian type, though the

Knossian system secured greater protection against the Cretan hurricanes. The Knossian attic, again, would have afforded a more efficacious shelter for the roof-top than the mere awning, which seems to have been its Egyptian equivalent.[1] No awning could stand a week against the boisterous winds that sweep this site. The timber framework and beam ends are also Northern characteristics.

It must be borne in mind, moreover, that while the Egyptian houses of which we have the records are isolated villas surrounded by courts and gardens, the gates and towers with which the Knossian house-fronts are associated lead us to suppose that they were ranged together in the actual streets of a fairly compact town, and that they are true examples of civic architecture. The influence of Egypt must be admitted, but there was certainly an indigenous core to this domestic architecture of Minôan Crete. The " Mycenaean " column itself is neither Egyptian nor Oriental, but a true outgrowth of a primitive European type.[2]

The plaques themselves somewhat vary in size, the mean of the houses being about 4½ centimetres in height and 4 in width. The ground colour representing the plaster or masonry is white or greenish, often with a lilac tinge. The timber is generally coloured brown or brownish green, sometimes with an admixture of crimson. The edges of each piece are slightly bevelled back.

The amount of small fragments found of these architectural plaques shows, that if, as appears probable from their occurrence in the same deposit, they belonged to a single mosaic, a considerable city must have been represented. But the city itself seems to have formed only a part of a larger composition. Other plaques occurred representing a great variety of subjects, though, unfortunately, as will be seen by the examples given in Fig. 10, for the most part, in the same fragmentary state as the houses.

Among the subjects figured on these are men and animals, trees and running water. The men are, in most cases, warriors, dressed in the same short, close-fitting loin-cloths, as that worn by the Cup-bearer and the youths of the Procession painting. These hold either spears or bows of the European and African type. On two pieces are what appear to be curved and crested helmets; in some cases the figures seem to be marching. Others, in a very fragmentary state, are in a half-kneeling pose which recalls that of the bowmen of the siege-scene on the silver vase from Mycenae. In another case there is seen a part of a prostrate figure, or perhaps of two men grappling with one another. The warrior plaques are of very different sizes; those with the upright figures, measuring respectively about 8 and 5 centimetres in height, must therefore belong to different zones or panels. The skin colour here is of a pale ochreous tint, and the loin-clothing of a greenish hue. In addition to these, however, are other figures with a more swarthy skin colour, some of them exceptionally small, and with hands stretched out as if in the guise of suppliants. The lower part of a larger figure of this dark-skinned type takes a curious squatting and frog-like attitude.

---

[1] See Chipiez's reconstruction of a Theban house of the Eighteenth Dynasty. Perrot et Chipiez, *L'Art*, &c. vol. I, p. 283, Fig. 267.

[2] See my *Mycenaean Tree and Pillar Cult*, p. 88 seqq.

Among the fragments with animal types are parts of several goats with ibex-like horns, resembling those of the Cretan agrimi, and the foot of an ox. Two kinds of trees are represented, one perhaps intended for a vine, the other with willow-like foliage. Some pieces with curving horizontal bands of white and green seem intended to depict running water. The succession of similar types on plaques of the same size and shape, observable in the case of the marching warriors, of the goats, and of some of the houses, points to an arrangement in zones. On the other hand, the great discrepancy in size of some of the figures—specially noticeable in the case of the dark-coloured men—suggests distribution in quite distinct compartments. This kind of discrepancy is best explained perhaps if we suppose that the porcelain plaques formed part of the inlay of a wooden chest, in which case the more diminutive figures might have been set on the smaller sides. That they were made smaller on account of any attempt at perspective rendering in the same field is hardly probable.

It is to be observed that the porcelain plaques found in the Throne Room occurred in association with a mass of more or less carbonised cypress wood, which shows that they were set in a framework of that material, probably, as in other cases, overlaid with thin gold plate. With this analogy before us, we may recognize in the present mosaic the remains of the decoration of a wooden chest, a true δαιδαλέα λάρναξ like that of Danaê, and may see in it the remote prototype of the Chest of Kypselos—the porcelain plaques here taking the place of the ivory. The character of the inlay—a native imitation of Egyptian porcelain—suggests that the type of chest to which these plaques may have belonged, was taken from Egypt; and the probability of this is heightened by the

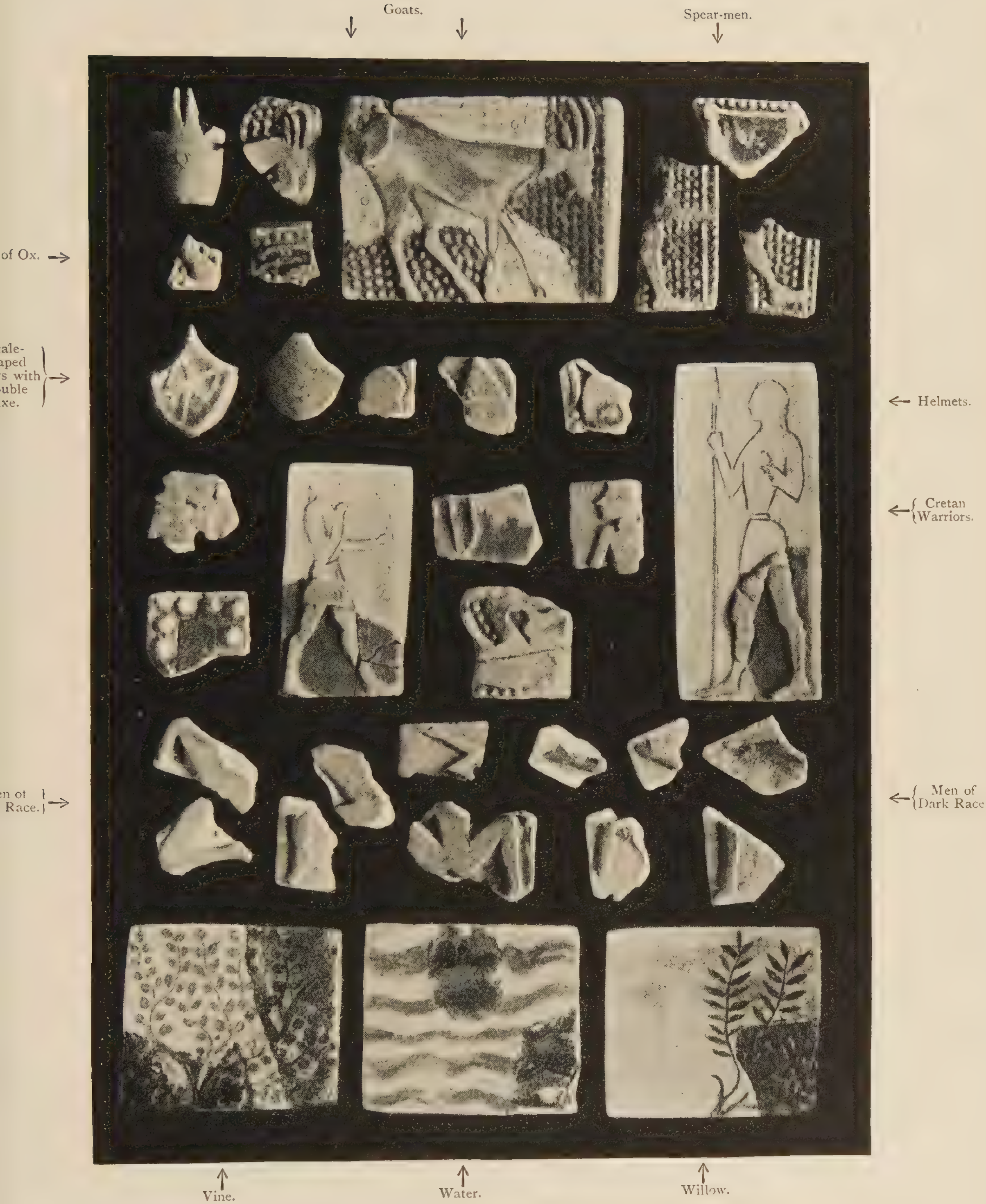


FIG. 10.—PORCELAIN TABLETS SHOWING WARRIORS, ANIMALS, ETC.

fact that the painted terracotta λάρνακες of the late Mycenaean tombs of Crete were certainly imitated from the painted chests of contemporary Egypt.[1]

The scenes depicted in the present mosaic, however, were not of that mythological class which, according to Pausanias, filled the zones and panels of the masterpiece of early Corinthian carving. We have here, on the contrary, *genre* compositions greatly recalling those of the Miniature Frescoes. The architectural scenes on these, the warriors manning the walls and hurling javelins, supply distinct analogies, though the treatment in that case is of the free pictorial kind. In the present case the character of the material necessitated a more rigid distribution into zones and the breaking up of these into a succession of separate unities contained by the several tablets. The mechanical facility moreover of casting numerous plaques from the same mould seems to have favoured serial groups repeating the same design.

The fragmentary nature of the evidence only enables us to realise vaguely and imperfectly the contents of the whole composition as distributed into the various zones and panels. The warriors and city recall the siege scene of the silver vase, but the warlike episodes do not by any means exhaust the aspects of the record once unfolded in these mosaic groups. The homes of civic life within the walls, the goats and oxen without, the fruit trees and running water, suggest a more literal comparison with the Homeric description of the scenes of peace and war as illustrated on Achilles' shield than can be supplied from any other known source. The division into zones and panels lends additional point to this resemblance.

The scenes here are obviously of real life. The houses before us are those with which the artist was familiar in Knossos itself. The warriors wear the usual dress of the Knossian youths. The art here is historical; and in the dark-skinned, and—in one case at least—grotesque figures of the vanquished we have perhaps a living record of a Libyan expedition. Nor is it certainly without definite intent that on the back of each of the scale-shaped pieces of enamelled ware, which seem to have formed a kind of decorative border to part of the design, is seen in relief a figure of the sacred Double Axe, the emblem of the tutelary divinity of Minôan Knossos.

---

[1] See *The Palace of Knossos in its Egyptian Relations*, p. 3 (Archaeological Report of Expl. Fund, 1899–1900, p. 66).

## § 7.—EARLIER ROOMS IN OLIVE-PRESS AREA BENEATH LATER PALACE BASEMENTS.

Throughout the whole space included by the Olive-Press system, the basement containing the enamelled mosaic, that with the remains of the spiral fresco, and the adjoining chamber South of the latter, a whole group of rooms with an earlier floor level came to light underlying those of the Later Palace.

The preceding discoveries have made it evident that the area in question was occupied during the Later Palace Period by a series of basements with a simple earth flooring, which lay about 1·80 metres beneath the level of the ground floor pavements. When, at the time of the destruction of the Palace, these ground floor pavements were partly broken through, the cellarage below became a receptacle for masses of important debris from the upper storeys, and it was in various compartments of this that the remains of the spiral fresco, the painted stucco figures in high relief, and the porcelain mosaic, were found lying on or near the basement floor.

Below this wall-marked line, which lay at a mean depth of about 2·50 metres below the existing surface of the ground, there was a comparatively barren interval. But the walls of the chambers continued to descend, and, about 2·40 metres lower, there came everywhere to light the evidence of a series of earlier floorings, the material of which consisted of hard white stucco with a pale yellow surface. Upon this level, and in the stratum immediately above, ceramic and other remains became once more abundant, all belonging to an earlier Palace building.

This earlier Palace floor level was in its turn superposed on a Neolithic deposit containing fragments of black hand-burnished pottery, stone and bone implements and other relics, which went down with a varying thickness of from 3·20 to 3·60 metres to the virgin soil. The total thickness of the deposit containing the remains of these various periods amounts, therefore, to about 8·50 metres as measured from the surface to the ground.

Nothing could be more complete than the stratification thus exhibited. Evidently the earlier floor level represented the ground-floor rooms of the original Palace, and it was specially interesting to observe that here the main lines of the later Palace were simply superposed on those of the more ancient building. It was indeed often difficult to determine where the remains of the earlier walls ended and the foundations of the later work, largely composed of more primitive blocks, began.

Painted stucco belonging to the primitive fabric occurred in several chambers, some *in situ*, some fallen. In the room beneath the North-East corner of the Olive-Press room two plaster steps were found going down to the floor of the room, the steps sloping in the characteristic manner of the early steps in the Palace of Phaestos. Near this the early walling was coated to a height of about a metre with the original plain plaster. In the space South of the area of the Spiral Fresco were found parts of a plaster dado belonging to this earlier Period.[1] It was decorated with horizontal bands of red, white, and black and curved streaks descending from this which showed an alternation of colours—black, white and grey-blue, black and white, red, yellow and black. The character of this polychrome decoration differed from that of the Later Palace.

In the North-West corner of this space is a plaster platform which runs under the foundations of the later basement wall and shows that this space and that beneath the room of the Spiral Fresco originally opened into each other. This platform was covered by a compact layer of fragments of 'Kamáres' ware, above which was a heap of over four hundred clay loom-weights, flatter than the later Palace type. Another similar plaster dais of white stucco, with pale yellow facing like the pavement, came to light in the area beneath that of the Spiral Fresco. In this chamber were large pieces of fallen stucco with a pinkish surface, backed by a cement composed of pounded potsherds and small pebbles.

In the South-East corner of this area was found what appeared to be part of a chest of red and yellow stucco. It is possible that this chest had originally contained two interesting relics found near it. One of these is a miniature vase of blue 'porcelain,' with a foot, collar and thimble-like receptacle of gold-plate, which may have contained some perfume as precious as attar of roses (see Fig. 11). The other consists of very elegant fern-like sprays of thin gold plate and wire (see Fig. 12). These were laid on a small flat bowl of plain clay containing some carbonised substance. It is possible that this relic was of a votive character, and that it should be taken in connexion with a series of painted terracotta objects found near this and in the same stratum which relate to a very early cult of the Dove Goddess. These are of such importance and so varied in character that a summary description of them is reserved for the succeeding Section.

---

[1] See Theodore Fyfe, *op. cit. Journ. R. I. B. A.*, 1902, p. 109, figs. 1, 2.

The 'Kamáres' pottery found in this area included a series of miniature amphoras, cups, and oenochoae, in a perfect condition, and remains of several large vases which it has been possible to put together. The smaller vessels for the most part display a plain white decoration—such as spirals, concentric circles, herring-bone pattern and sprays,—on a black or dark grey ground, and range from about 6 to 8 centimetres in height. The large

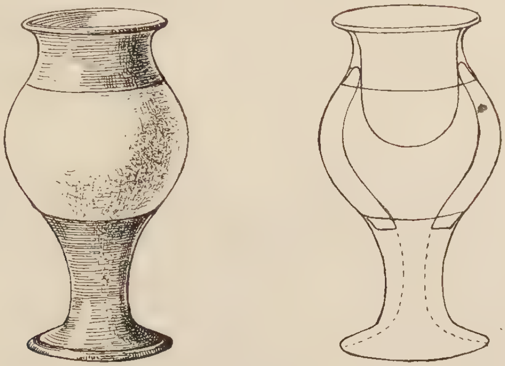


FIG. 11.—SMALL VASE OF PORCELAIN AND GOLD ($\frac{1}{1}$).

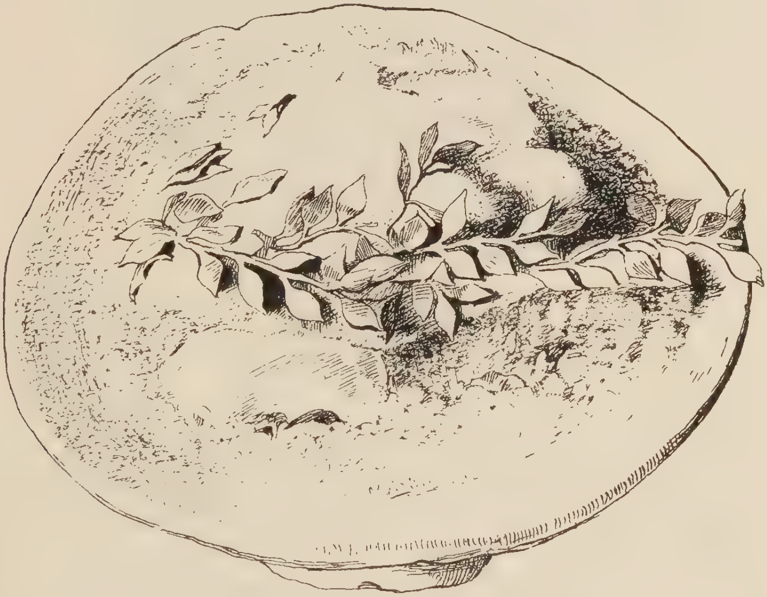


FIG. 12.—GOLD SPRAY IN FLAT BOWL ($\frac{1}{1}$).

vases show a greater variety of design and colour—including, besides black and white, orange-red, and crimson—and are the finest of the class that have yet come to light, some approaching .60 centimetres in height. Among the decorative motives are eyed disks combined with leafy sprays (Fig. 13 *a*), conventional palm trees, together with other patterns similar to those already mentioned. The specimen given in Fig. 13 *b* shows a

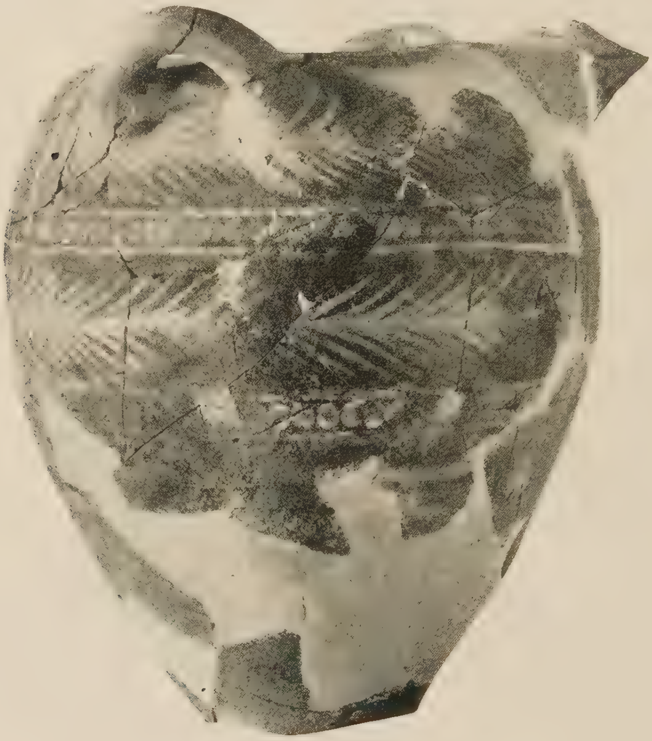


FIG. 13 *a*.—PAINTED JUG (1/6).

spouted vessel of a typical form. It is 58 centimetres in height and has a dark grey ground with designs in white and orange-red showing dull crimson spots on the orange. These vessels from their form and style seem to belong to rather a late class of what may be called the 'Minôan' Ceramic style and it is observable that there did not occur in this series of chambers any of the finer egg-shell fabrics with their delicate imitations of metallic forms such as were contained in some of the magazines on the lower Eastern Terrace (see below, p. 117 *seqq.*). On the other hand there was nothing of the purely transitional class which characterises the later Palace.

A comparison of levels shows that the ground floor level of the early chambers above described was the same as that preserved later in the Hall of the Double Axes and its connected system to the South and in the 'School Room' and adjoining chambers to the East. It was only during the period of reconstruction that immediately preceded the Mycenaean Period proper, and to which the Palace in its existing shape is mainly due, that these more Northern ground floor rooms, half choked with debris, became the basis of later cellarage areas underlying a terrace level which formed the new 'ground floor' in this region.

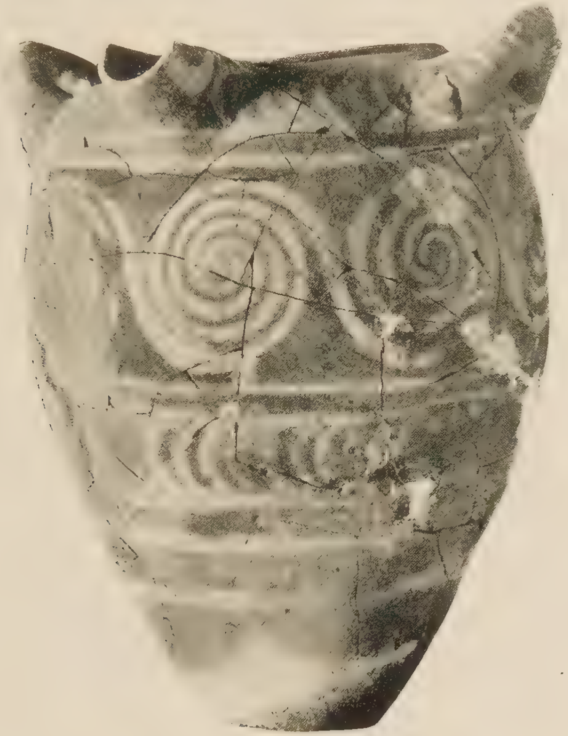


FIG. 13 *b*.—PAINTED JUG ($\frac{1}{8}$).

## § 8.—MINIATURE SANCTUARY OF DOVE GODDESS IN PAINTED TERRACOTTA, AND ACCESSORY OBJECTS.

In the early chamber, underlying the later cellar with the remains of the Spiral Fresco, and which contained in addition to fine, later Minôan vases the golden fronds and small gold and porcelain bottle, there were also brought out a series of painted terracotta objects of great religious interest.

These terracotta relics consisted of the remains of a miniature Sanctuary including a Pillar Shrine with sacred doves, altars with their ritual horns, a kind of portable seat for a divinity, and other accessories. The remains of some of these had been a good deal broken, but in many cases it has been possible to fit together the pieces, and with further study additional reconstruction may be eventually possible. The objects as they stand, however, quite suffice to throw an altogether new light on the prae-Mycenaean cult of the 'House of Minôs.'

The original surface of the terracottas, which varies from buff to pale brick-red, has been coloured black, white, and red—the characteristic colours, that is, of the early vases with which they were associated.

Of special importance is a group of three columns (Fig. 14), the round, rectangular profiled bases of which are ranged along one edge of an oblong platform. The columns themselves show no tendency to taper. The capitals are square and leave a small interspace between each as if they were pieces of an interrupted architrave. Across each of these square capitals are laid side by side two sections of round beams, their circular ends showing in front, and again upon each of these is perched a dove with closed wings. The doves are black with white spots, the beam-sections, capitals and columns are red, their bases black, and the platform upon which they stand white.

It will be seen that here each column is a separate religious entity. Instead of the three combining to support a common entablature, the whole superstructure is in each case separately rendered by the two sections of round beams on which the sacred birds are seated. By a kind of architectural shorthand each column by itself is thus indicated as a 'Pillar of the House.'[1] We have here, therefore, the most ancient known example of the class of sacred pillar seen on the Lions' Gate at Mycenae and on a series of Mycenaean gems and signets.[1] The trinity of baetylic columns, moreover (so popular in Semitic cult), recalls the fact that in the case of the gold shrines of Mycenae, and again in the Temple Fresco from the Palace of Knossos, we find a triple group of pillar cells. There can be little remaining doubt that the miniature dove shrines of Mycenae refer to the cult of the same Goddess that we find at Knossos, and that there, as here, we have to recognise an example of the setting up of trinities of baetylic pillars representing the same divinity.[2]

---

[1] I can only refer to what I have said on the subject of the sacred pillar exhibited as performing structural functions and a 'Pillar of the House' in my *Mycenaean Tree and Pillar Cult*, p. 45 seqq. (*J.H.S.* vol. xxi. 1901, p. 143 seqq.)

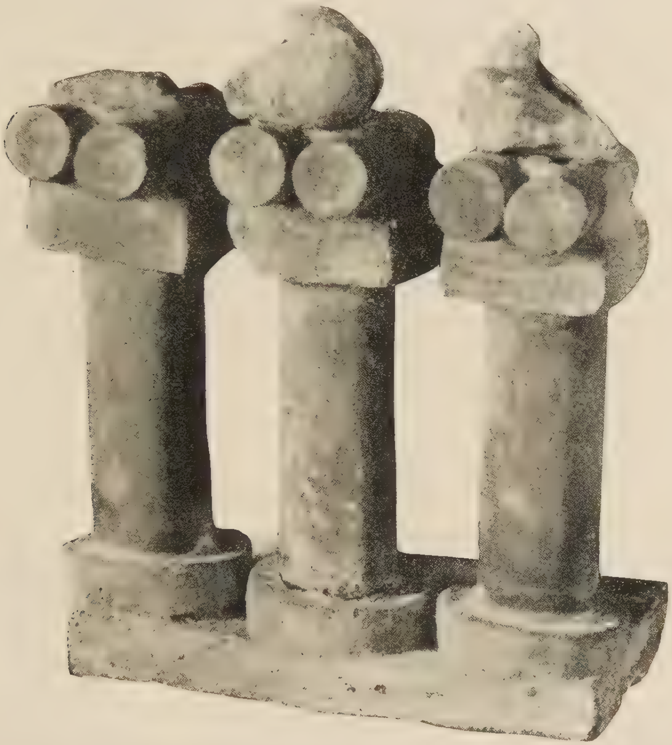


FIG. 14.—PAINTED TERRACOTTA PILLARS WITH DOVES; BELONGING TO EARLY SHRINE.

The conclusive evidence now before us that the pillar-cult of a Dove Goddess[3] goes back, in Crete at least, to the prae-Mycenaean period is of first-rate importance in its bearing on the origin of the cult itself, and its relation to the parallel religious phenomena presented by the worship of the Syrian Semiramis[1] or the Phoenician Astartê. The crude view that the little dove shrines of Mycenae were mere import articles from Phoenicia has already almost died a natural death. The divine associations of the dove were a common heritage of primitive Greece and Anatolia, and it is a significant fact that the principal centre of the cult on the coast of Canaan was 'Philistine' Askalon, whose mythical founder Askalos was the brother of Tantalos the founder of the Phrygian dynasty and father of Pelops. We are thus led to an ethnic quarter that had a very intimate relation with Minôan Crete. A Palace shrine, described below, shows us a later stage in the local cult of the Dove Goddess in association with that of the Double-Axe (*see* below, pp. 100 *seqq.*) and makes it probable that the Cretan Rhea in her earlier aspect was also a 'Lady of the Dove.'

---

[1] See *op. cit.* p. 58 seqq.

[2] In the monograph above cited (p. 42) I had already ventured to suggest this explanation of the triple pillar cells of the Mycenaean dove-shrines surmounted as they are by a single altar.

[3] As pointed out below (pp. 98, 99) the dove is primarily the image of the divine descent and of the consequent possession of the baetylic column by a spiritual being. This is not necessarily a *female* divinity, for the dove also appears as the "Messenger" of Zeus, but the evidence seems to show however that it had early attached itself as a special attribute of a Goddess in the Aegean lands.

It is possible that there are here parts of more than one shrine, since there are columns of varying sizes. A characteristic of the walls of these edifices is the chequer-work of black and white indicating either actual masonry or a stucco coating in imitation of it. Identically coloured chequer-work occurs in the Temple Fresco. The stonework is broken at intervals horizontally by square-cut slightly projecting cornices, upon the white ground of which is painted a series of red disks which seem to represent the round wooden beam ends of Knossian wall-construction reduced to a mere decorative reminiscence. In one case what appear to be four somewhat narrow window-openings are seen above a substructure of the kind described above.

A part of a square altar with similar chequers surmounted by a plain cornice shows a pair of sacral horns rising above one face and part of another on a second face imperfectly preserved. The square altar recalls one constructed of isodomic masonry, with 'Horns of Consecration' above it, seen on a steatite pyxis from the site of Knossos,[2] and the presumed altar bases found in the Palace courts probably belonged to similar structures. Four other examples of miniature sacral horns were also found.

A base with incurving sides recalls another familiar adjunct of

---

[1] M. Salomon Reinach has well shown, *La Sculpture en Europe avant les influences Gréco-Romaines*, p. 561 seqq. (Anthropologie, VI.), that there is not the slightest reason for deriving the Dove Goddess from Babylonia.

[2] *Myc. Tree and Pillar Worship*, p. 103, Fig. 2.

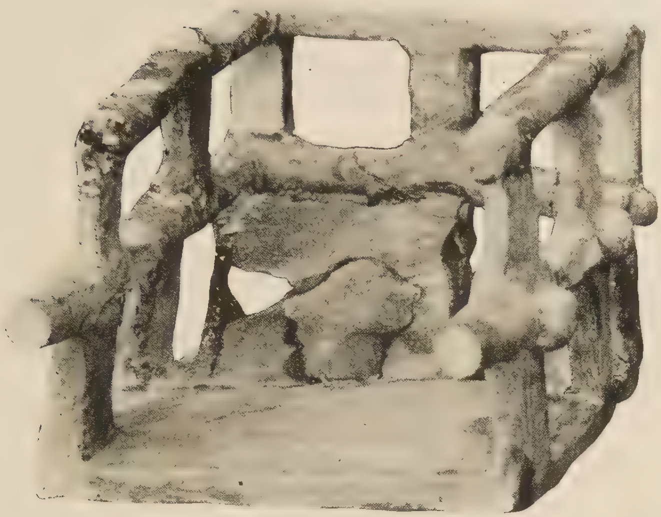


FIG. 15 *a*.

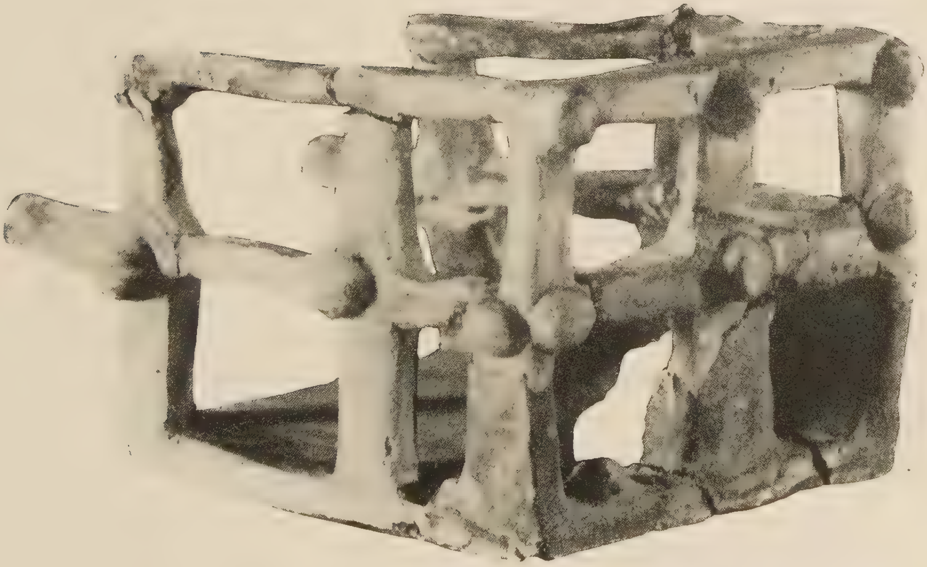


FIG. 15 *b*.—PORTABLE SEAT OF DIVINITY IN PAINTED TERRACOTTA (SLIGHTLY REDUCED).

Mycenaean religious furniture. The present example resembles a base, with the sacral horns above it, before a triple group of sprays, engraved on a crystal lentoid found in the Idaean Cave. The scene on the gem connects itself with the cult of a group of sacred trees, and a female votary is seen before the base blowing a large triton shell,—apparently a ritual function resorted to with a view of calling down the divinity. It is interesting to note that among the accessory objects found with the remains of the terracotta Sanctuary were parts of three miniature triton shells, the clay spires of which are painted alternately red and white.

A remarkable object remains to be described (Fig. 15*a* and *b*). At first sight it looks like a miniature car with a seat at the back, in front of which are visible what seems to be the roughly modelled extremity of a seated figure. The open wooden framework and joints are clearly rendered and there project in front what look like truncated shafts. On the other hand there is no trace of any attachment for wheels, and it may well be doubted if wheeled vehicles existed in Knossos in the early period to which these remains belong. The shafts of a car moreover would be attached to its floor, and not, as here, to the middle of the seat.

On the whole therefore, it seems safe to regard it as a kind of palanquin or sedan chair, and this view is confirmed by the traces of broken off shafts behind, answering to those in front.[1] The Priest Fresco referred to in the previous Report seems to connect itself with a figure borne aloft in some kind of chair, and we have here perhaps the *sella gestatoria* of a divinity or priest.

## § 9.—FURTHER DEVELOPMENTS ON THE QUADRUPLE STAIRCASE.

The ground-floor walls and piers of the area that includes the Room of the Olive Press and the Corridor of the Bays give, as already noticed section by section, the outline of a great Megaron above, the plan of which seems to have been practically identical with that of the great upper hall of the Palace of Phaestos. It is probable that the Quadruple Staircase discovered in 1901, besides leading to the Central Court immediately South of this hall, communicated with the Megaron directly by a doorway in its South wall.

It has already been noticed in the last Report that a block by the third landing of this staircase showed the outlines of the ends of three steps ascending North, and supplied the evidence of a fourth flight of stairs. Another similar block originally found above the second landing proved on examination to bear the marks of the ends of three more steps belonging to the upper end of this fourth flight where it reached the level of the Central Court. At the cost of much labour this important block has now been replaced in the position that it had occupied previous to its fall. (See Fig. 23.)

---

[1] The breaks are wrongly restored as knobs in Fig. 15*b*.

The leaning position of the thick rubble wall that formed the division between the upper staircases involved a far more difficult problem. It had heeled over to such an extent above the third flight as to threaten the destruction of both the stone stairs and the parapet beyond. It was impossible to prop it up adequately and it became necessary to resort to heroic measures. I therefore had a deep incision made at a low level on either side, wedges being at the same time inserted in the slit on the side to which it leaned. The wall was at the same time cut across transversely at the point where the window opening between the two staircases lessened the amount of cutting necessary. The whole mass was then cased with planks on either side, and bound round with ropes so as to prevent its disintegration. A wooden framework firmly buttressed against the inner terrace was now set up to act as a stop, its face answering to the original position of that of the wall on this side. Sixty men, harnessed by ropes to the plank-encased wall-section, were now stationed on the terrace above the inner staircase, and at a given signal the tug of war began. There was a moment of great suspense, but the whole mass moved homogeneously and the wall righted itself in its original position. Stones and cement were ready to fill up the wedge-shaped opening along the outer staircase, and the work was complete.

An interesting light on the former decoration of the Quadruple Staircase seems to be thrown by a plaster fragment which had fallen into the adjoining 'Court of the Distaffs' (see below, p. 63 *seqq.*) apparently from one of its upper walls. It represented part of a brilliantly coloured palmette frieze.

## § 10.—CONTINUED EXPLORATION OF THE EAST-WEST CORRIDORS: THE 'PERCENTAGE' TABLETS.

The Lower Corridor leading Eastward from the foot of the Quadruple Staircase and the North end of the Hall of the Colonnades had only been very partially explored in 1901.

The doorway leading into this passage from the Hall of the Colonnades was now opened (see p. 2, Fig. 1); the carbonised remains of its original wooden jambs being as far as possible protected by the solid wooden framework that it was found necessary to insert for its support. The doorway opening from the Corridor to the Hall of the Double Axes was at the same time cleared and supported with masonry as well as woodwork.

The excavation of this Westernmost and finely paved section of Corridor was a work of exceptional difficulty. This was due to the fact that the upper tiers of masonry belonging to this section of the light area of the Hall of the Double Axes had subsided a good deal in the direction of the doorway communicating with the Corridor and gave rise to a serious thrust on that side. The cause of this subsidence was discovered to be the original existence of a large double window with wooden framework, which had been introduced at this point with the object of lighting the Corridor from the open area at the end of the Hall of the Double Axes (see Fig. 21). This opening had been filled with fallen rubble, forming a very insecure support, and it was found advisable to support the wall on the inner or Corridor side by flat brick buttresses arched together.

The Lower East-West Corridor itself was excavated from above, the remains of the steps and pavement of the Corridor above it being carefully supported in their original position. At the same time the abundant fallen fragments of the upper pavement were collected and reconstituted at their former level, it being necessary in order to do this to build a solid timber framework from one end of the lower Corridor to the other with a platform above by means of which both the existing and the reconstituted parts of the upper pavement were maintained in position (Fig. 16). The pavement of the Upper Corridor was about 4·20 metres above the floor of the lower, its height representing that of the upper floor throughout this quarter of the Palace. The Eastern section of the lower Corridor, from the door of the Hall of the Double Axes onwards, showed no traces of the fine gypsum paving that had continued to that point. The walls, however, had been provided with a similar casing of gypsum plaques.

The East end of this Lower Corridor is cut short in its direct course by the substructures of the stairs that form the continuation East of the Upper Corridor. Thus diverted, the lower passage opens on its North side on a small rectangular area leading to the 'Room of the Wooden Posts,' and thence to an Eastern terrace edge. The gangway between this small area and the room beyond is flanked by a pillar originally of timber and rubble construction supporting a large gypsum block above, belonging to the upper storey, and which had been visible above the level of the ground on the East slope before the excavation began.[1] The pillar rested

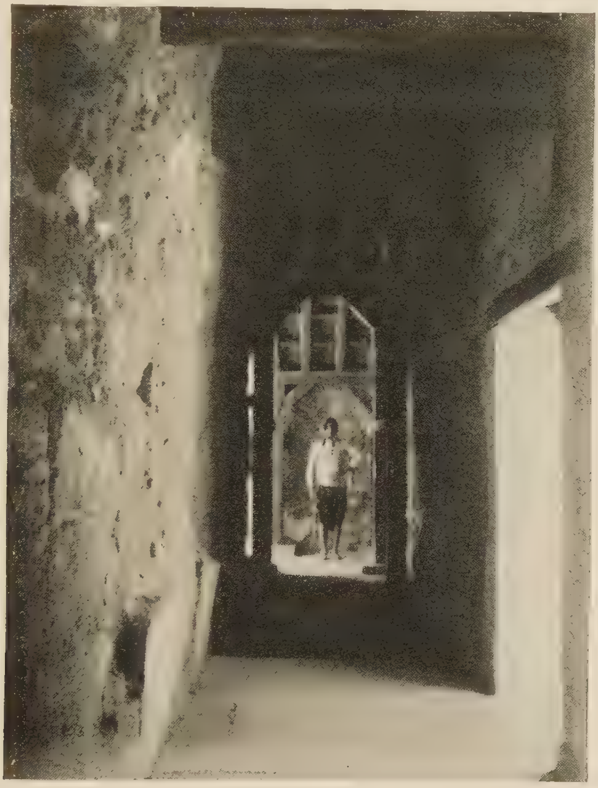


FIG. 16.—VIEW IN LOWER EAST-WEST CORRIDOR (LOOKING E.).

---

[1] This block was maintained in the position in which it was found by means of wooden props, till the disintegrated pillar that had once supported it could be replaced by one of stone. This has now been done, and the block is thus permanently fixed at the level at which it was found.

on a square base rising from a breastwork or balustrade, the upper part of which consisted of flat gypsum slabs. Beneath this gypsum coping was a break of 20 centimetres between it and the masonry below, backed by a core of plaster and rubble, originally contained in a timber casing, a form of construction common in the Palace, and well illustrated by the Throne Room and by the bath-chamber to be described below.[1] The space above the gypsum slabs, between the pillar and the wall at the other end of the breastwork, had been left open as if to give light to the Room of the Wooden Posts. This circumstance, and the necessity of lighting the East end of the lower Corridor, makes it probable that the smallre ctangular area in question had served as a light-well, and was entirely open above. It is to be borne in mind that it was on a higher stratum of this area and the adjoining space to the West of it that the deposit of the painted high reliefs in *gesso duro* was found in 1901, and they may well have formed part of the decoration of an upper gallery or portico connected with the great Eastern Megaron and overlooking this light area.

The Lower East-West Corridor thus cleared, and with the flooring of the Upper Corridor replaced above, forms an imposing gallery—about 2 metres in breadth and 4 in height (Fig. 16). Its length is 14 metres or, adding the Northern arcade of the Hall of the Colonnades, which is practically its continuation, 23 metres. Only fragmentary remains, and these in a very much burnt condition, were found of the elaborate painted dado which seems to have adorned this gallery above the wainscoting of gypsum slabs. Its design was characterised by an oval beading, found elsewhere in the Palace decoration, and which recurs in some of the ceiling patterns of XVIIIth Dynasty Egypt.

The Upper East-West Corridor, which seems to have had the same internal dimensions as the Lower, attains, together with its staircase and the section corresponding with the North Gallery of the Hall of Colonnades and the second landing of the Quadruple Staircase, a length of 40 metres. The steps up from the lower terrace level were originally twenty in number,[2] of which fifteen were preserved, while the missing five—which had bridged over the entrance of the lower passage—have been reconstructed. The view from the West end of this Corridor looking along the upper Gallery of the Hall of the Colonnades towards the third flight of the grand Staircase is one of the most striking in the building (see Fig. 17).

---

[1] See p. 52, 53 and Fig. 27.

[2] Not fifteen, as stated in *Report B.S.A.* vii. 1901, p. 99.

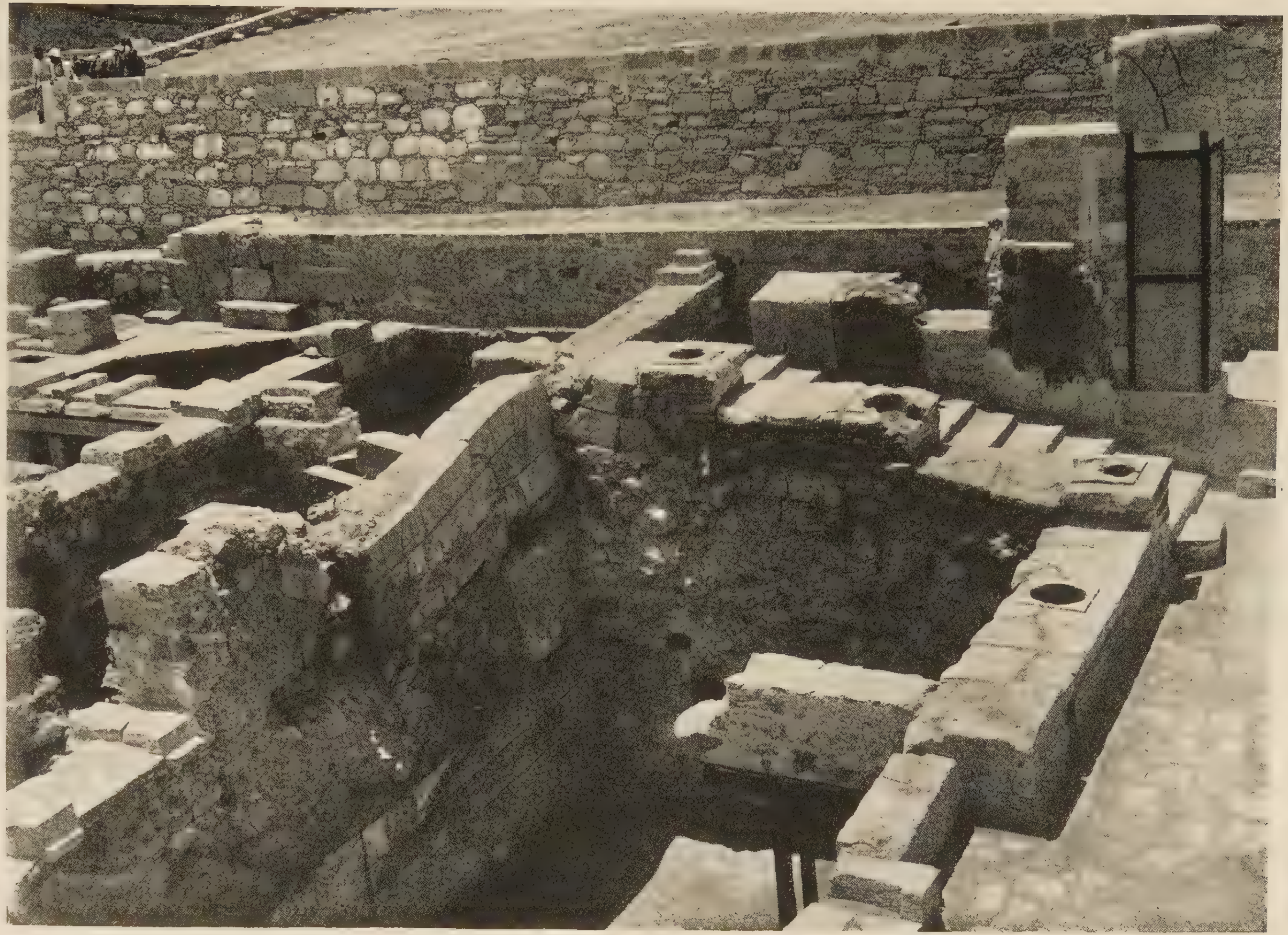

Upper Latrine.
Stone Bench on Upper Floor.
Court of the Distaffs (below).
showing Marks of Stairs of Fourth Flight.
Window between Staircases.
showing Mark of Stairs of Fourth Flight.
Reconstructed Pillar supporting Upper Stair Block.
Third Flight of Quadruple Staircase.
Ascending Balustrade with Sockets for Columns.
Pillar-bases and Door-jambs of Room of Stone Bench.
Staircase [probably Wooden Stairs.]
Door Jambs and Threshold of Upper Passage.
Wall sunk above Window Opening
Hall of Colonnades : Quadruple Staircase beyond.
Upper East-West Corridor.

FIG. 17.—VIEW LOOKING WEST FROM UPPER EAST-WEST CORRIDOR.

Extensive remains of deposits of inscribed tablets and seal impressions were found, partly above the pavement level, along the line of this Upper Corridor from the head of its Eastern Staircase to the point where it enters the Gallery of the Hall of Colonnades. It seems probable therefore that there had originally existed above it some kind of elongated chamber, flanking, and on the same level with, the Great Megaron above the Olive Press area, and that this had been used for the storage of these clay archives.

With the falling in of the floor of the upper East-West Corridor large masses of tablets and seals belonging to the same series as those found in 1901, above its floor level, had been precipitated into the Corridor below. During the continued exploration of this lower stratum, which resulted in the clearing out of the Lower Corridor, great numbers of inscriptions were found, raising the total number from this deposit to over 450, more than a hundred of which are practically perfect. This is the largest hoard discovered. The tablets exhibit formulas the general purport of which is very uniform, and the great majority of them present figures referring to three different items of account, the total of which when added together amounts to 100. It appears, therefore, that they relate to percentages, and they thus supply a striking proof of the prevalence of the decimal system in Minôan Crete. From the fact that the bulk of the deposit extended along a line of about ten metres, it is probable that the tablets were contained in a series of chests. Among the seals found with them were several impressions of what we are led to regard as having been a royal signet, exhibiting a seated Goddess offered a cup by her attendant, of which a counterfeit matrix in clay was found in 1901 in a room above the South Terrace.

## § 11.—GOLD PENDANT IN FORM OF A DUCK.

About a metre below the floor level of the Upper East-West Corridor were found a part of a thin silver blade and a few articles of jewelry. These consisted of two globular beads, one of glass, the other of solid gold, and a gold filigree ornament in the shape of a miniature gold duck (Fig. 18). It was perforated to be used as a pendant, and evidently belonged to the same necklace as the beads.

Like the small gold lion found in 1900, the present jewel supplies an interesting example of granular decoration of gold work, though in this case the grains are less microscopic than those of the gold lion. Both the lion and the duck are constructed in the same manner by means of two thin plates welded together above and below, the amount of precious metal employed being thus economised to the greatest possible extent.

The duck as a bead or pendant of 'Mycenaean' fashion in Crete was already known to me from two examples seen in the East of the island. One of these was found some years back at Palaeokastro. It is of red cornelian perforated longitudinally (Fig. 19), and shows on its lower face a rude intaglio of a ship. Another specimen of a similar cornelian bead also came under my notice in the same Cretan region. But these duck beads are simply an imitation of contemporary Nilotic types. There is in the Ashmolean Museum[1] a bead of this form also of red cornelian (Fig. 20), which might have stood as the prototype of that from Palaeokastro, with a cartouche below containing the name of Amenhotep III. (c. 1400 B.C.). The gold pendant bead must also be traced back to the same class of Egyptian models.

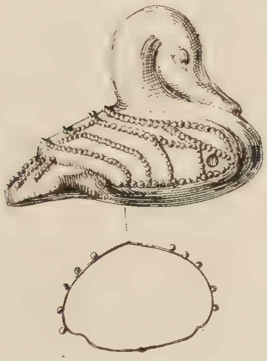


FIG. 18.—GOLD PENDANT IN FORM OF DUCK ($\frac{1}{1}$).

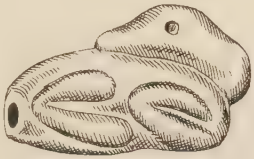


FIG. 19.—CORNELIAN DUCK BEAD ($\frac{2}{1}$).

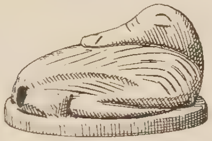


FIG. 20.—EGYPTIAN DUCK BEAD ($\frac{2}{1}$).

## § 12.—THE HALL OF THE DOUBLE AXES AND ITS SOUTHERN PORTICO.

In the doorway leading from the Lower East-West Corridor to the Hall of the Double Axes was part of a steatite vase presenting a variety of the usual 'caliciform' type with a double series of petals. As already noted, the former existence of a large window, opening from the light area of the Hall into the Corridor, now explains the appearance of collapse that characterises the upper courses of limestone masonry belonging to the section immediately to the right of the doorway on entering (Fig. 21). The whole upper part of the wall has only been saved from utter ruin by the fallen materials from above that had found their way into the aperture.

---

[1] Fortnum Collection.

The horizontal cavity which runs along the West and South sides of the light area of this Megaron between the fourth and fifth courses of masonry was wrongly interpreted in the previous Report.[1] This gap in the masonry, as there noted, had been partly filled with coarse lime and terracotta cement in which were visible a succession of round sockets originally occupied by sections of wooden beams. It was suggested that these beams had projected into the end of the Hall, where they had formed the base of a kind of raised wooden platform.

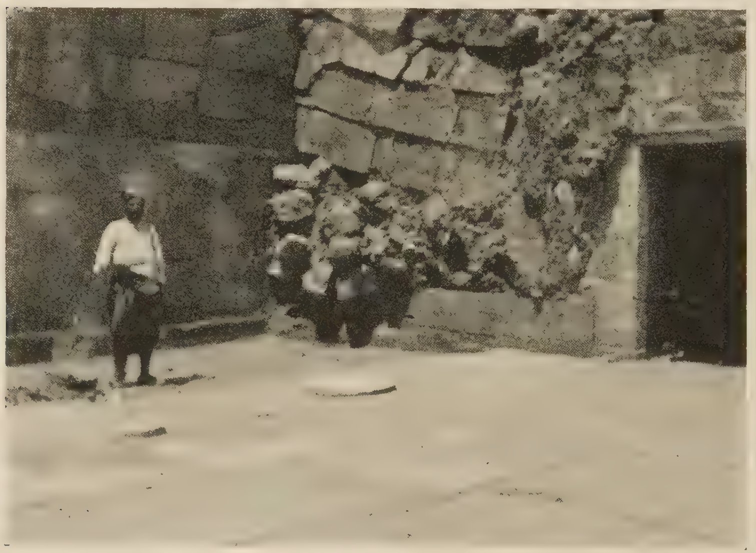

Collapsed Window looking into Lower East-West Corridor.
Gap for Wooden Beams in W. Wall.
Doorway into Lower East-West Corridor, Reconstructed.
Column Base.
Column Base.

FIG. 21.—VIEW IN HALL OF DOUBLE AXES SHOWING COLLAPSED WINDOW OFF LIGHT AREA.

---

[1] *Report, &c.* 1901, p. 113.

But the examples of construction since supplied by the porcelain houses and miniature shrine, and the further evidence afforded by neighbouring rooms has now made it clear that the round sockets in question contained nothing more than short sections of beams answering in length to the thickness of the wall. What we have here to deal with is, in fact, merely an architectural survival derived from the old rubble and timber construction, a regular feature of which was the laying of courses of short round beams at intervals in the walls, the ends of which were visible in the face of the building separated by plaster-covered zones or panels.

The round beam ends so much affected by the Mycenaean builders were translated into stone or plaster in the shape of rosettes and coloured disks which are their decorative survival. It is obvious that the wooden beam ends thus arranged symmetrically along the walls of the light area of the Hall of the Double Axes were masked by ornamental features of this kind. Its prominent position makes it not improbable that the surface of the cavity in which the round beam ends lay was covered, in this case, with decorative reliefs in metal-work, representing rosettes, with or without connecting spirals. These, like all other objects of metal on which the occupants could lay their hands, were doubtless removed at the time of the destruction of the Palace.

Nor is direct evidence wanting as to the general character of the design here exhibited. The band formed round the light area by the gap between the fourth and fifth courses of masonry was in fact continuous along the interior walls of the Hall of the Double Axes immediately above the gypsum slabs (almost exactly 2 metres in height) which formed their lower lining. There are here, indeed, no traces of round beam ends, but there are visible in places the sockets of horizontal beams which formed the backing of the plaster along this zone.

The same system of construction is continued uninterruptedly by a small passage, to be described below, to an inner hall and a bath chamber lined to the same level by gypsum slabs. But here, as will be shown in Section 15, the space immediately above the groove left by the horizontal beams is still filled in part with a painted frieze of spirals and rosettes. The intensity of the conflagration seems to have destroyed the frescoes in the body of the Hall of the Double Axes, but near its Southern Portico portions of painted frieze were found consisting of spirals and rosettes and answering exactly to that in the adjoining bath-room. There can be little doubt, therefore, that this identical design followed the same zone in both rooms, and it is reasonable to suppose that, what is practically its continuation, the decorative band, namely, *ex hypothesi* of metal work that once masked the gap in the masonry of the light area, exhibited a closely parallel design.

Analogy might lead one to suppose that the gypsum slabs that originally lined the whole of the interior walls of the Hall of the Double Axes were coloured. But the corrosion of the surface on these lining slabs here and elsewhere has obliterated the evidence of this. These inner walls were divided into a succession of bays by fine upright posts of wood, between which was stone and rubble work, the whole surface being covered with a clayey plaster against which in turn the gypsum lining slabs were applied to a height of two metres.

Further exploration of the Eastern end of the Hall gave rise to an interesting development in the shape of a second Portico facing South (Fig. 22). This Portico, at right angles to that to the East, consisted of a massive corner base of limestone 1·10 metres square, common to both colonnades, three round column bases (·70 in diameter) and a pilaster in the wall-line to the West answering to the corner pillar.[1] Near the bases were masses of carbonised wood representing the remains of the pillars. Stone pavement extended to the outer line of the Portico, beyond which was a rectangular area about 4·30 metres wide and over 11 in length with a cement floor.

Above the level of this open space, especially along and in part overlying the good limestone courses that formed the lower part of its Western boundary wall, were found quantities of fallen stucco with fresco designs. This deposit, which also extended into the space beyond the wall, exhibited designs of fish and a female figure, described below, and it probably belonged mainly to the 'Queen's Megaron,' excavated on that side. A piece of bas-relief in coloured *gesso duro* was, however, of a character which points to a more public position, such as an open gallery. It consisted of a man's thigh life-size with the edge of a brilliantly coloured loin-cloth. With the plaster fragment were found fragments of painted Mycenaean pottery of the finest Later Palace style. About two metres beyond

---

[1] The spaces between the columns were 1·64 and 1·60 m., between the East column and pillar 2 m., between the West column and pilaster 1·98 m.

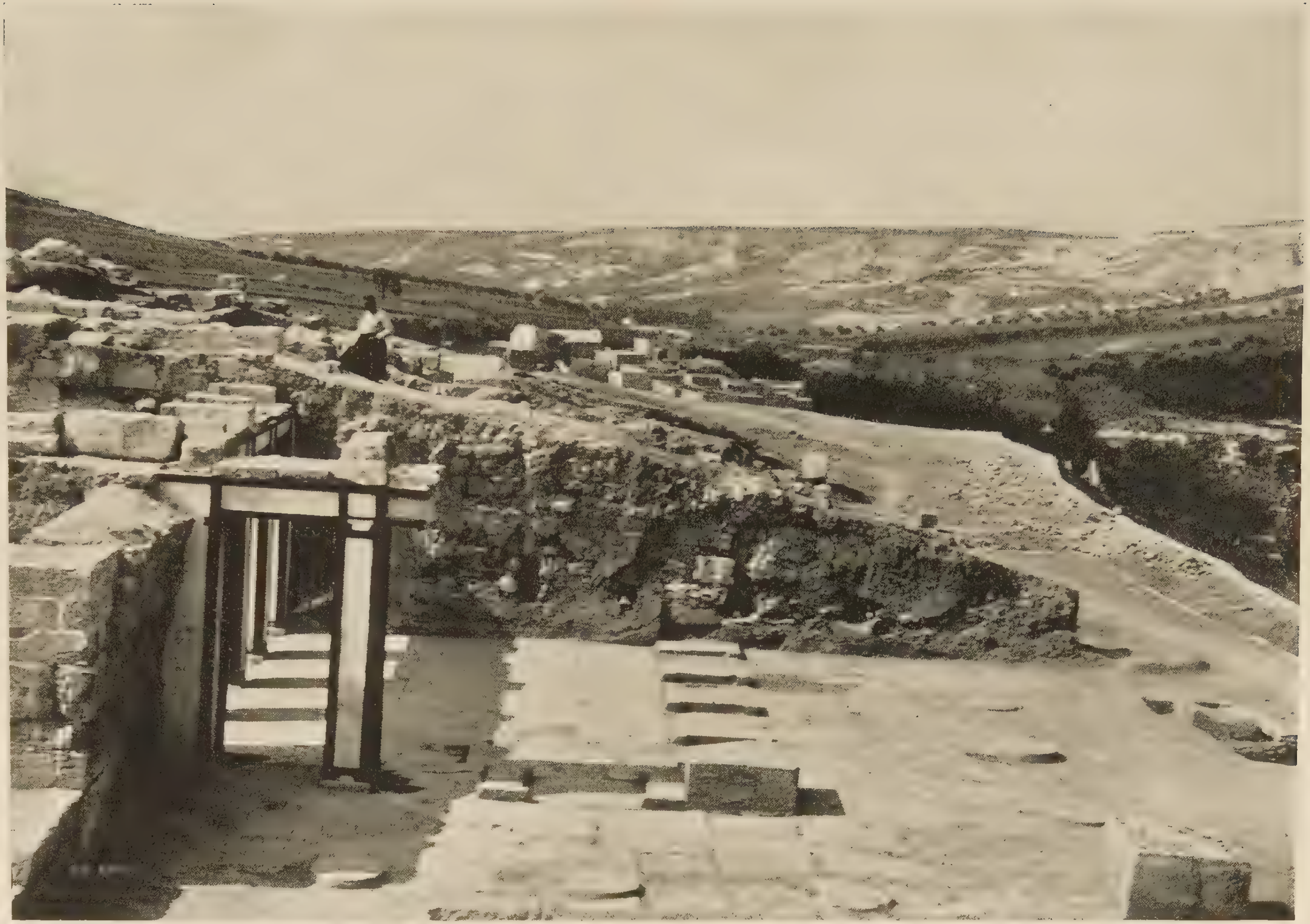

Village of Makryteichos.
Pillar Bases on Upper Floor Level.
Valley of ancient Kaeratos.
Part of N. Wall of Queen's Megaron Enclosing Private Staircase.
Corner Block stepped down E.
Part of E. Wall of Queen's Megaron.
Wood and Rubble Pillars above Lower Bases Reconstructed to Support Upper Pillar Bases and Pavement Found in Position.
Column Base.
Line of Pillar Bases.
Column Base.
Line of Column Bases.
Corner Pier.

FIG. 22.—VIEW OF EASTERN SECTION OF HALL OF DOUBLE AXES SHOWING E. AND S. PORTICOES.

the Northern column base of the East Portico of the Hall of the Double Axes is a curiously cut limestone block on a stepped pedestal, which seems to have been one of an outer line of piers in connexion with a broad line of steps descending East, that has now disappeared. The course of a large stone drain runs in front of the line.

The Hall of the Double Axes, with its two-fold Portico, formed a spacious chamber which, excluding the rectangular court to the South, embraces an area of somewhat over 250 square metres. It has the appearance of a large reception room, the post of honour in which, perhaps, marked by a movable throne, was probably against the North wall facing the middle of the Southern Portico and approached by the eleven openings between the pillars.

## § 13.—UPPER HALL OF THE DOUBLE AXES.

It has already been mentioned that a series of pillar bases and the intervening sections of pavement belonging to the room above the Hall of the Double Axes were found in position, only slightly sunk below their original level. Two further pillar bases subsequently came to light, corresponding to two of those found below facing the Southern Portico. The first series had been already temporarily supported in their position by means of a wooden scaffolding which, both in the case of these and the bases, has now been replaced by pillars of wood and stucco answering as nearly as possible in character to those which had originally stood there (see Fig. 22).[1] These rest on the original limestone bases.

A further hint as to the original construction of this upper room was the discovery above the floor level of the Southern Portico of a slab with a segmental cutting made for the insertion of part of the diameter of a column, like the parapet slabs that flank the impluvium of the Throne Room. We have here a valuable indication of the arrangement adopted in upper galleries answering to the Southern and Eastern Porticoes below. It is obvious that on the upper galleries some kind of breastwork was needed, and the analogy of the Throne Room makes it probable that a continuous stone bench ran here between the columns, as shown in Mr. Fyfe's upper storey plan on p. 57.

---

[1] The newly made supporting pillars with their corner posts of wood are clearly shown in this figure.

## § 14.—THE DOG'S LEG CORRIDOR AND THE DOMESTIC QUARTER OF THE PALACE.

Immediately opposite to the door at the upper end of the Hall of the Double Axes communicating with the Lower East-West Corridor, was another corresponding doorway. This, on being opened out and supported above by a flat arch as a protection against lateral thrust, gave access to a short paved passage with a turn at both ends, and to which from its shape the name of 'Dog's Leg Corridor' has been given. It is evident that this double turn greatly enhanced the privacy of the room beyond.

The Dog's Leg Corridor is finely paved with limestone slabs, and on its North and West sides retains the wainscoting of gypsum slabs, each about two metres in height and one metre in width, above which ran the groove already referred to, originally fitted with wooden beams laid horizontally. Above this again the wall construction, largely belonging to the upper storey, was preserved for a height of over five metres from the floor level.

This short corridor, after passing a limestone pier and plinth on the left, gave access to an interesting and quite original hall. This hall formed the principal room of a self-contained quarter of the Palace, having none of that semi-public character noticeable in the case of the Halls of the Double Axes and of the Colonnades. There is every appearance that we have here to deal with suites of private and domestic apartments, somewhat carefully secluded from the busier section immediately to the North of this with its great staircase and through corridors in direct connexion with stately halls that must have mostly served as a gathering-place for the men. In this quarter, on the other hand, we note on every side arrangements for securing privacy and comfort, together with sanitary conveniences in some ways ahead of anything the world was to see for the next three thousand years.

We have here (*see* pp. 56, 57, Plans, Figs. 29, 30) the centres of the domestic and family life of the Palace. To apply to this section indeed the oriental name of 'Haremlik' might convey a wrong idea, since there is no question—witness the miniature frescoes—of a rigorous separation of the sexes in the 'House of Minôs.' We are at liberty to believe, however, that this secluded quarter was in a special way the domain of the women, and the distinctive name of the 'Queen's Megaron' has been accordingly given here to the most stately withdrawing room of this region.

## § 15.—THE QUEEN'S MEGARON WITH ITS BATH ROOM AND REMAINS OF WALL-PAINTINGS.

The hall here described as the 'Queen's Megaron' was found to be divided into an inner chamber, with an adjacent bath-room and elongated area, and an outer part consisting of a portico opening on another enclosed area that served as a light court on that side.

Of the back wall of this outer area, which separated it from the space in front of the South Portico of the Hall of the Double Axes, only two, or, in places, three courses remained in position. These courses are of good limestone masonry, and the disappearance of the upper part perhaps implies that it consisted of rubble masonry and timber, with the usual plaster facing. A later wall of poor construction had been built near the outer line of the Portico within. At the same time the masses of painted stucco that had presumably covered the original back wall of the light area had been cast aside and formed a heap above and on each side of its remaining lower courses.

This demolition and poor reconstruction leads us to a series of related phenomena that made themselves apparent not only in the 'Queen's Megaron' itself but throughout the whole of the deep cut section of the Palace South of the Quadruple Staircase and the Halls of the Colonnades and of the Double Axes. Throughout this area there were abundant signs, like those already noted in the Southern basements and in the rooms West of the Northern entrance, of a re-occupation in the mature Mycenaean Period. There is some evidence that the intensity of the conflagration which has left such obvious traces in the great halls to the North of this area was on this side so far mitigated that some even of the upper rooms were left in a more or less habitable state.

In clearing away in successive horizontal sections the deposit above the Queen's Megaron, which, towards its Western limit, attained a depth of over 6 metres, a series of large stirrup vases and amphoras were found, partly piled one over another, above the remains of pavement belonging to an upper floor level (See Fig. 23). It seemed indeed as if a large part of the original upper floor had been used as a magazine for these vessels, which with their coarse decoration of octopuses, or often simple bands, in dull colours, must be regarded as a characteristic product of the

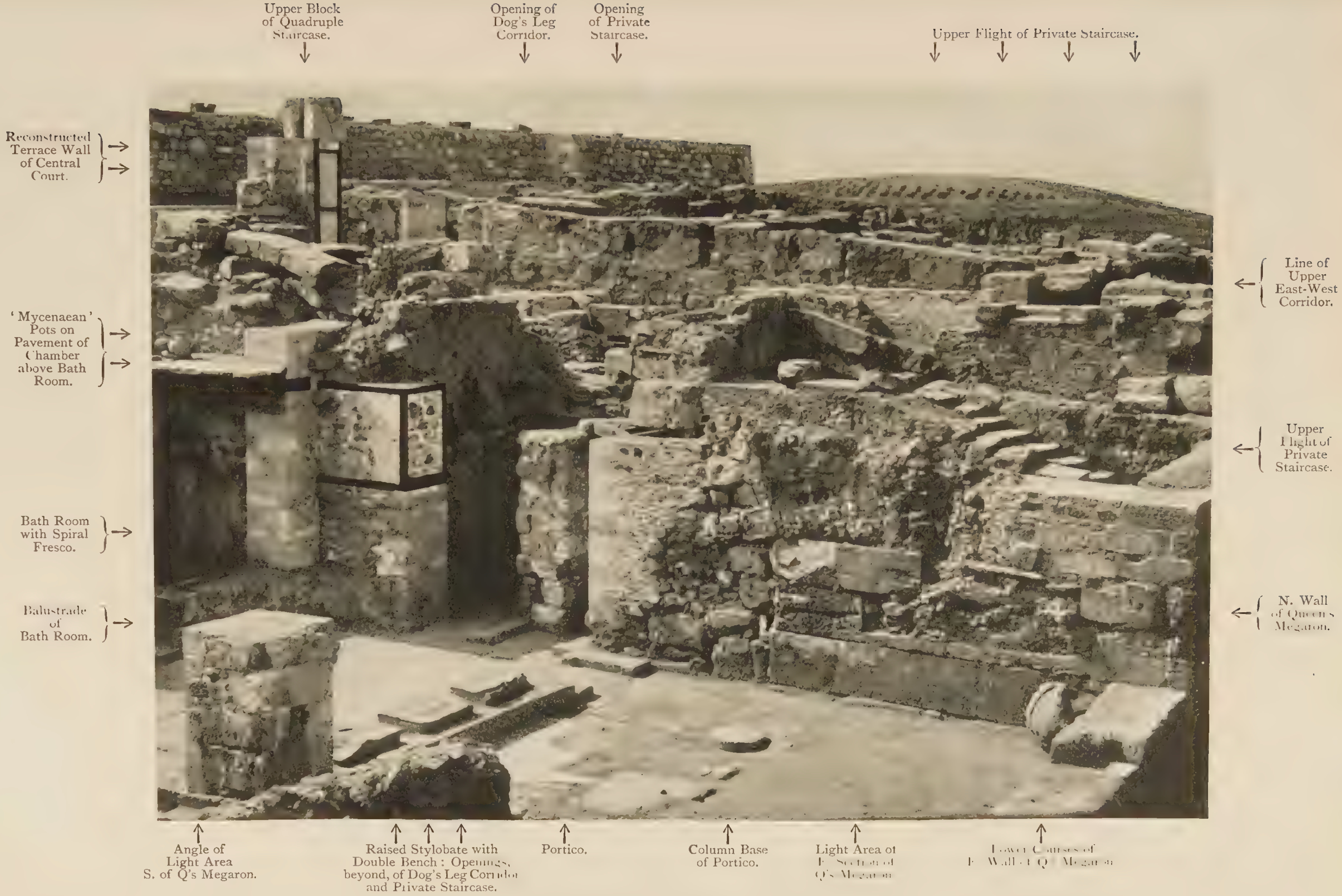

Upper Block of Quadruple Staircase.
Opening of Dog's Leg Corridor.
Opening of Private Staircase.
Upper Flight of Private Staircase.
Reconstructed Terrace Wall of Central Court.
'Mycenaean' Pots on Pavement of Chamber above Bath Room.
Bath Room with Spiral Fresco.
Balustrade of Bath Room.
Line of Upper East-West Corridor.
Upper Flight of Private Staircase.
N. Wall of Queen's Megaron.
Angle of Light Area S. of Q's Megaron.
Raised Stylobate with Double Bench: Openings, beyond, of Dog's Leg Corridor and Private Staircase.
Portico.
Column Base of Portico.
Light Area of E. Section of Q's Megaron.
Lower Courses of E. Wall of Q's Megaron.

FIG. 23.—VIEW FROM S.E. CORNER OF QUEEN'S MEGARON.

Mycenaean Period proper. Over the body of the hall the remains of the upper floor level had fallen in at an early period, and the vases were found for the most part in a broken condition at a lower level. Above the little bath chamber however, thanks to a later supporting wall built above the balustrade, the store had been less displaced, and many vases in perfect condition were ranged against the walls of the upper storey room.

It looks as if shortly before the final desertion of the building a comprehensive plan of restoration had been set on foot throughout the region above defined. On approaching the floor of the Megaron below, there was found everywhere a stratum of lime, and the adjoining bath chamber had been used as a special deposit of the same material, while a late *pithos* full of lime stood in its entrance passage. A small chamber immediately South of the portico of the Megaron was found moreover to have been actually turned into a kiln, in which were found a number of mature Mycenaean cups and vases. It was obvious that the plaster on the North wall, as on the destroyed upper part of the East wall and again in the corridor leading to the inner rooms to the West, had been deliberately picked away and thrown aside in the heaps in which it was found. Oddly enough the earlier decorative plaster has only remained untouched in the upper part of the walls of the bath chamber, which itself had been converted into one of the chief receptacles for the restorer's lime.

It was not till after the removal of this thick lime deposit that the internal structure and arrangements of the Megaron could be fully made out (see Fig. 23). Both the interior part and the portico beyond were paved with fine limestone slabs, the pavement being replaced as usual by cement in the light areas to East and South. A more original feature was supplied by a raised base or stylobate which formed a division between the two halves of the Megaron, leaving a passage only at its Northern end.

The best idea of this structure will be given by the annexed plan and section (Fig. 24*a* and *b*), showing its existing state, and by the elevation and restored section (Fig. 25). The base was formed of limestone blocks, 26 cm. in height, faced with gypsum slabs, the whole breadth of the base being almost exactly a metre. Along the centre of this ran a raised ledge of varied composition, stone, rubble and plaster, on which were laid gypsum slabs with raised intervals between forming the bases of narrow piers. The lower ledges on either side of this central system had been covered with wooden boards, a good deal of which was preserved in a carbonised state, and the surface of this again was coated with cement. This plaster covering curved up against the slightly bevelled edges of the centre slabs (see Fig. 25) so as to get a good grip of the wood and at the same time to form a curved termination of the seat back similar to that found in the throne, and other examples. The stylobate thus fulfilled a two-fold function. It acted as the base of the narrow pillars, which, while leaving broad light openings, supported the room above. At the same time it provided a double bench. This bench was, as we have seen, of comfortable construction and the woodwork certainly projected sufficiently beyond the line of the stone to give the required depth for a seat. The moulded stucco surface of this was doubtless also covered with cushions.

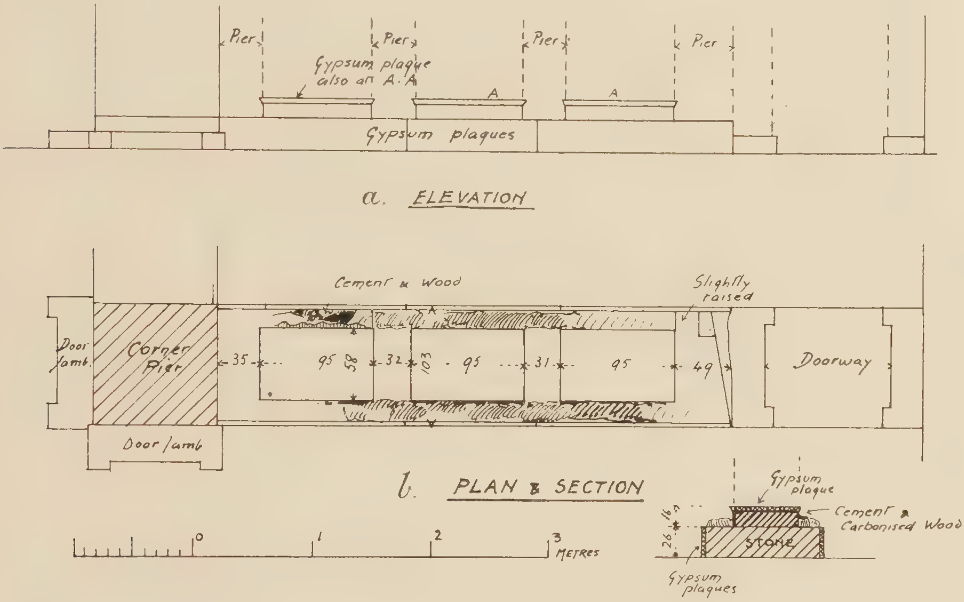


FIG. 24.—PLAN, SECTION, AND ELEVATION OF RAISED STYLOBATE WITH DOUBLE BENCH.

The total height of the seat from the ground may have been about 30 centimetres. This is lower than the benches of the Throne Room, but considerably higher than the plaster seat of the "Cook" in the small chamber behind it. It must however be borne in mind that this last mentioned seat was specially arranged for a person, presumably of menial condition, engaged in preparing food on a table only slightly raised above the floor level. It cannot therefore be regarded as conclusive for the height of the Minôan ladies' seats. On one of the Zakro gems for instance[1] a female figure, probably intended for a Goddess, is seen seated on a kind of stool without a back, the top of which comes nearly to the level of her bent knee. But there is no reason to suppose that the benches in the 'Queen's Megaron' were reserved specially for women. This was rather the general withdrawing-room of the family quarter of the Palace.

Along the South side of the inner part of the Megaron, facing the door opening from the 'Dog's Leg Corridor,' was another similar stylobate, formed in the same way of limestone blocks with a facing of gypsum plaques. It was of the same length as the other, but in this case the seat had only existed on the inner side. There was indeed no passage on this line into the light area beyond,—the stylobate running without a break from a square inner pier of good ashlar masonry to another pier forming the South-West corner of the room. The upper structure here has disappeared, but the former existence of a similar layer of woodwork was evidenced by certain mortises and dowel holes on the upper surface of the limestone blocks. From the fact that the length of this stylobate was

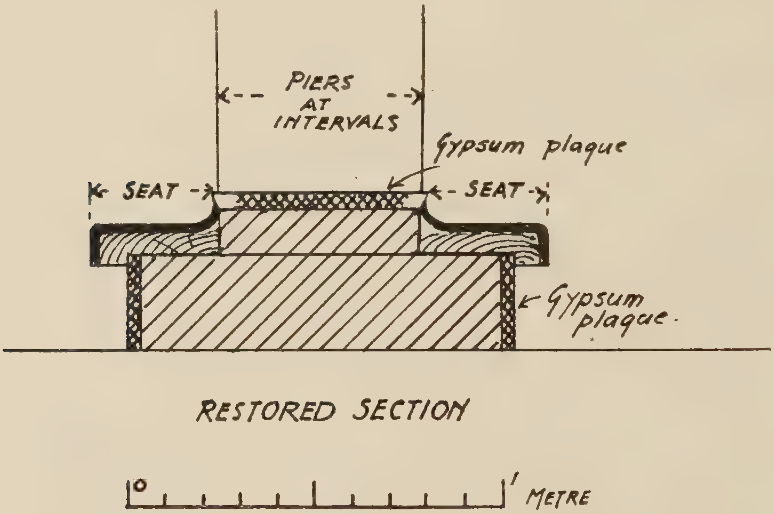


Fig. 25.—Restored Section of Stylobate with Double Bench.

---

[1] D. G. Hogarth, 'The Zakro Sealings,' *J.H.S.* xxii., Pl. VI. 3; and cf. p. 77, Fig. 2.

the same as the other, we may assume that it supported the same number of pillars with equal intervals between them.

The openings here were devised to give light from a narrow elongated area, about 1·40 metres wide, which derives a special interest from the character of its South wall. This wall consists of exceptionally large blocks (about 2·38 metres in length by 0·68 in height) somewhat roughly faced, in contrast with the smooth ground surface of the later masonry, and incised with the spray or branch sign, larger and deeper cut than the signs of the existing Palace. The blocks, moreover, had a more distinct clay bedding (necessitated by the unfinished surface) than is usually found in the building. This was particularly conspicuous in the horizontal lines —attaining a thickness of about a centimetre. There can be no doubt that this is one of the earliest existing walls of the building, and that it goes back at least to the close of what may be called the 'Middle Minôan Period.'

Another interesting feature about this light area is that in order to enable the light to slant in to the adjacent hall, the wall—or rather the later addition to it—steps back above.

It seems certain that this light area was during the latest Palace period covered with a brilliant stucco decoration. A pile of this, perhaps torn down at the moment of the would-be restoration, lay in the innermost corner of the area and supplied the evidence of a quite unique method of relief. This is illustrated by the fragment exhibiting part of a bird shown in Fig. 26, *a*, *b*, *c*. The bird itself, which is on a white ground, has long curving wings and feathers of brilliant and varied hues, red, blue, yellow, white and black.

The moulding of the relief as shown in the side view (*b*), and section (*c*) does not correspond with any recognised canons of relief. The wing ends are executed in a kind of sharp bas relief, but the tail feathers can best be described as cut in intaglio. It looks indeed, as if an artist accustomed to the technique of gem engraving had transferred the process to moulded *gesso duro*. Such a combination of crafts recalls the early Renaissance.

The interior part of the 'Queen's Megaron,' namely that directly approached from the Hall of the Double Axes, was thus lighted by a double series of pillar openings, one looking towards its East Portico, the other facing the Area of the Bird Relief on the South, and both flanked by shapely

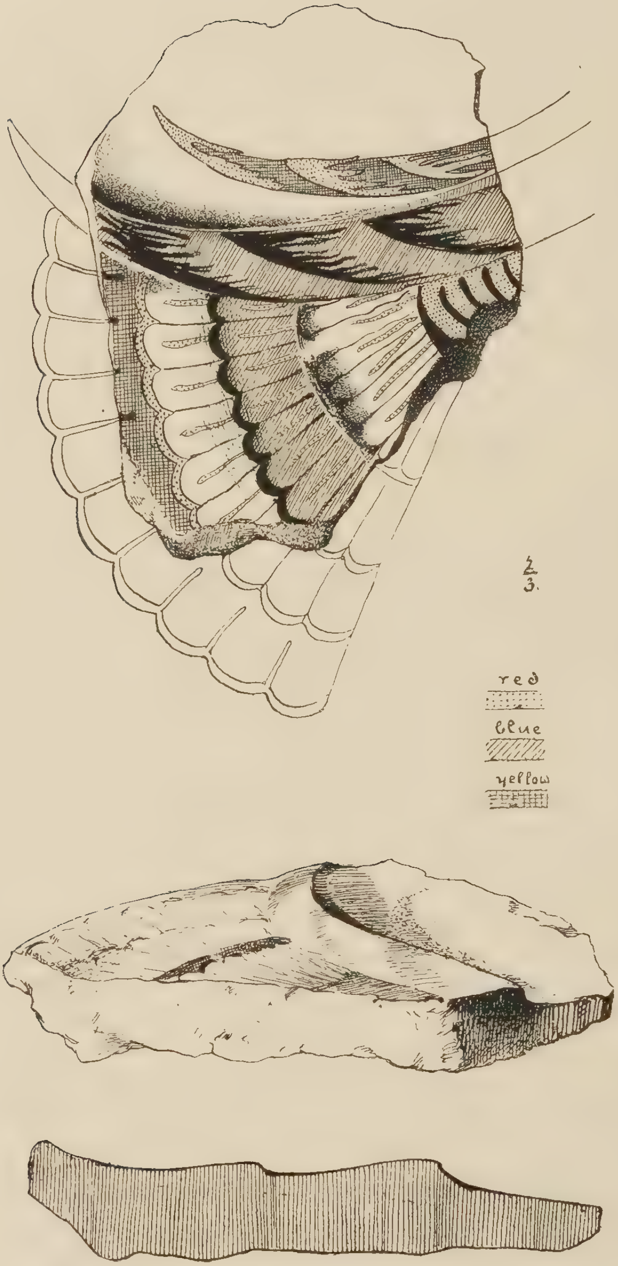
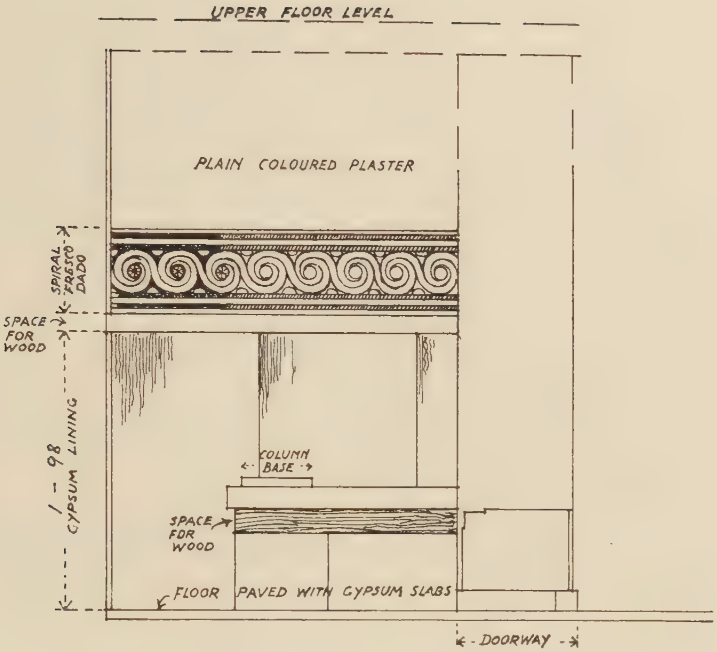


Fig. 26.—Views and Section of Painted Relief showing Bird's Tail and Wings.

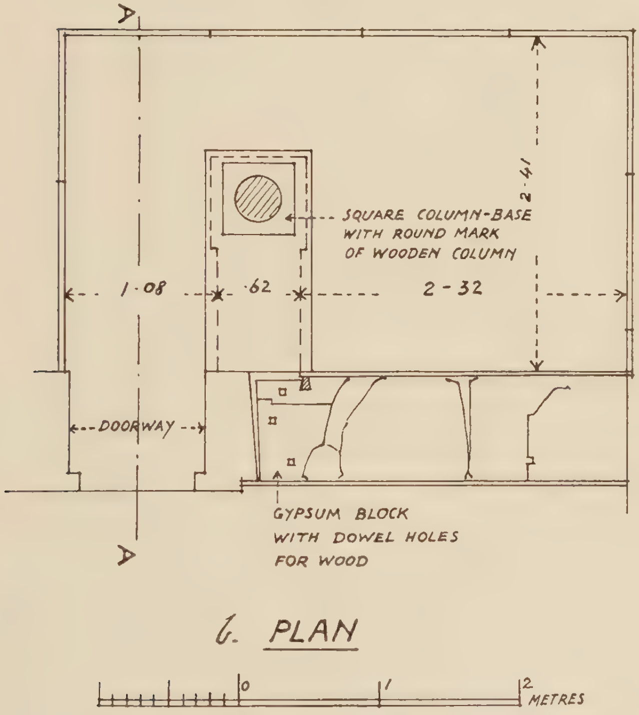
benches. In the North-West corner, immediately to the right on entering, was the small bath chamber already mentioned.

This bath-chamber, the details of which can be gathered from the annexed plan and elevation (Fig. 27, *a* and *b*), was flanked, like the Palace baths already described, by a balustrade, with corner and terminal piers. The latter of these was a column base, still showing the circular mark of a wooden column ·31 centimetres in diameter. The corner pier had dowel-holes for the wooden part of a pillar of the usual composite construction. The walls showed the characteristic gap for plaster and woodwork below the coping slabs, and the limestone blocks below this were faced, like the neighbouring stylobates, by gypsum plaques.

This bath-chamber differed in an essential point from those found elsewhere in the Palace.



a. SECTIONAL ELEVATION ON LINE "A·A"


2·41
SQUARE COLUMN-BASE WITH ROUND MARK OF WOODEN COLUMN
1·08
·62
2 – 32
DOORWAY
GYPSUM BLOCK WITH DOWEL HOLES FOR WOOD
0
1
2
METRES

b. PLAN

Fig. 27 *a*, *b*.—Plan and Sectional Elevation of Bath Room with Painted Spiral Frieze.

It had no descending steps, the basin being on the same level as the floor of the adjoining Megaron. It was constructed for a portable bath, and in fact considerable remains of a large painted terracotta bath were found in the portico of the neighbouring hall, having doubtless been turned out when the bath-chamber was used as a lime-store.

Neither was this bath-chamber in any way an 'impluvium' like that of the Throne Room. The present chamber was roofed over, and the openings between the pillars here were not for letting in light into the adjoining hall, but for enabling the light of the Megaron to penetrate into the bath-room, where, however, privacy may at any time have been attained by drawing curtains between the pillars.

Apart from other evidence of the existence of a room above, the good state in which the interior of the bath-room was found may be taken to show that it had not been exposed to the weather. The gypsum lining slabs, about 2 metres in height, were here exceptionally well-preserved, and above the upper margin of these were considerable remains of a frieze of painted stucco, already referred to in the treating of the 'Hall of the Double Axes.' The central band of this frieze or dado, which was about half a metre in width, consisted of rosettes, or conventional marguerites, linked by running spirals, with half rosettes in the angles.[1]

The communication from the inner part of the Queen's Megaron with its small bath room and double stylobate is confined to a single opening, which may be regarded rather as a passage-way between half pillars, like those of the Hall of the Double Axes, than a doorway proper. The outer portion of the Megaron thus entered, flanked by a bench answering to that on the other side of the stylobate, consisted of a paved portico with two column bases ·65 centimetres in diameter, facing to the East the enclosed light-area already referred to. On the South a doorway led from the portico to a small square room (that used later as a lime-kiln) with two other doorways, one communicating with the Area of the Bird Relief, the other leading through a narrower chamber to a passage opening opposite the South Portico of the Hall of the Double Axes. There was therefore a means of access to the Queen's Megaron from the East, though evidently controlled by a strict system of guardianship and surveillance. Three separate doors had to be passed and two small chambers to be traversed to enter from this side.

---

[1] See D. T. Fyfe, *op. cit.*, *Journal of R.I.B.A.*, 1902, p. 120, Fig. 43 (upper fig.).

In the North Wall of this outer section of the 'Queen's Megaron' were some exceptionally large limestone blocks—one 2·71 metres in length

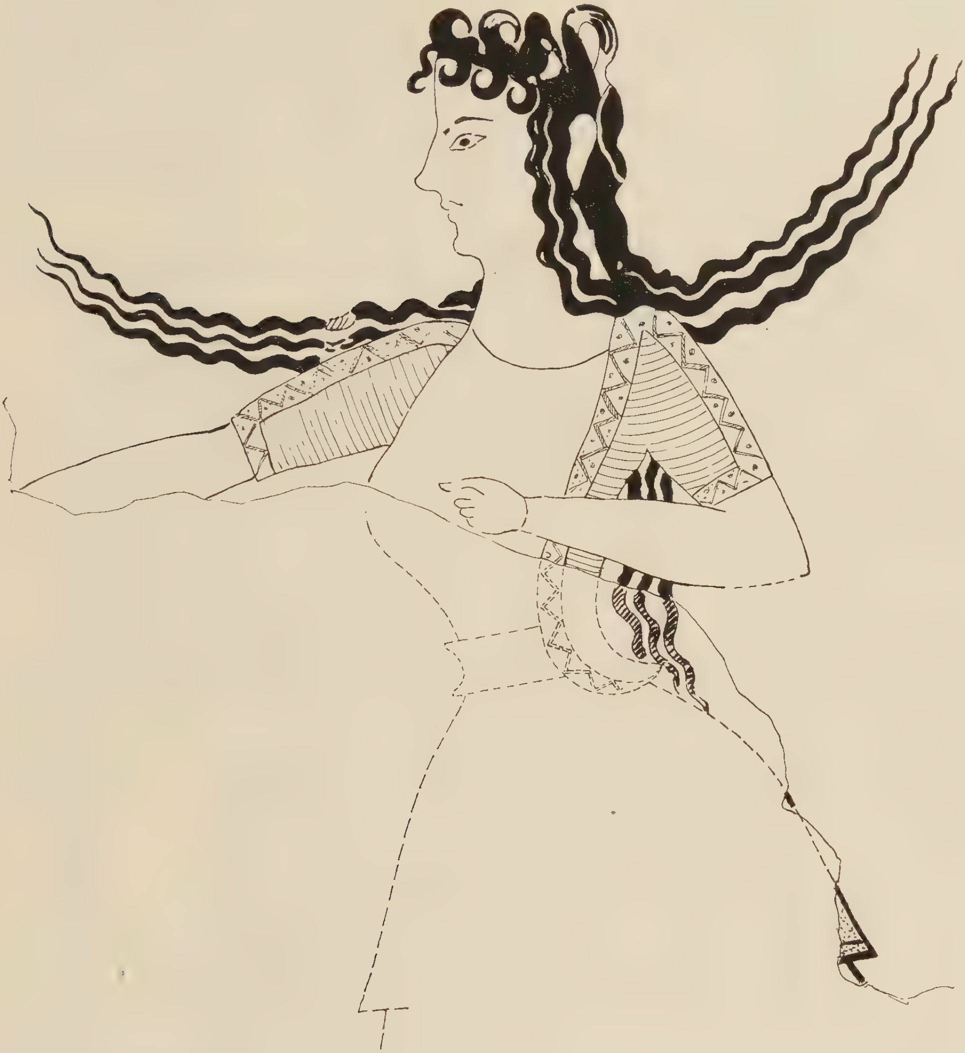


FIG. 28.—WALL-PAINTING OF LADY, APPARENTLY DANCING.

by 0·72 high—several of them marked with the Double Axe sign. This wall, which formed part of the casing of the private staircase to be described below, had been entirely denuded of its stucco decoration. It is possible,

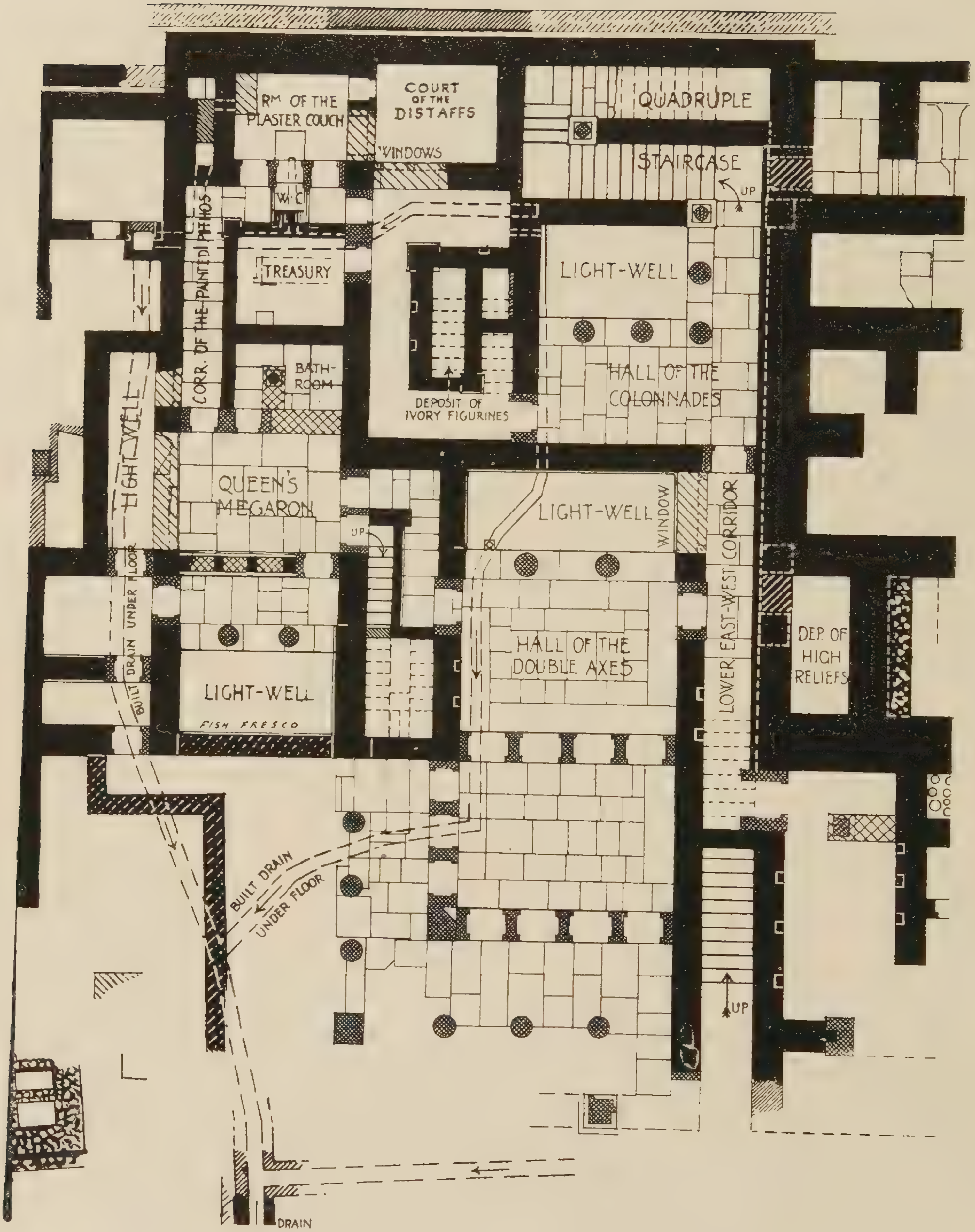


FIG. 29.—GROUND FLOOR PLAN OF DOMESTIC QUARTER AND ADJOINING HALLS.

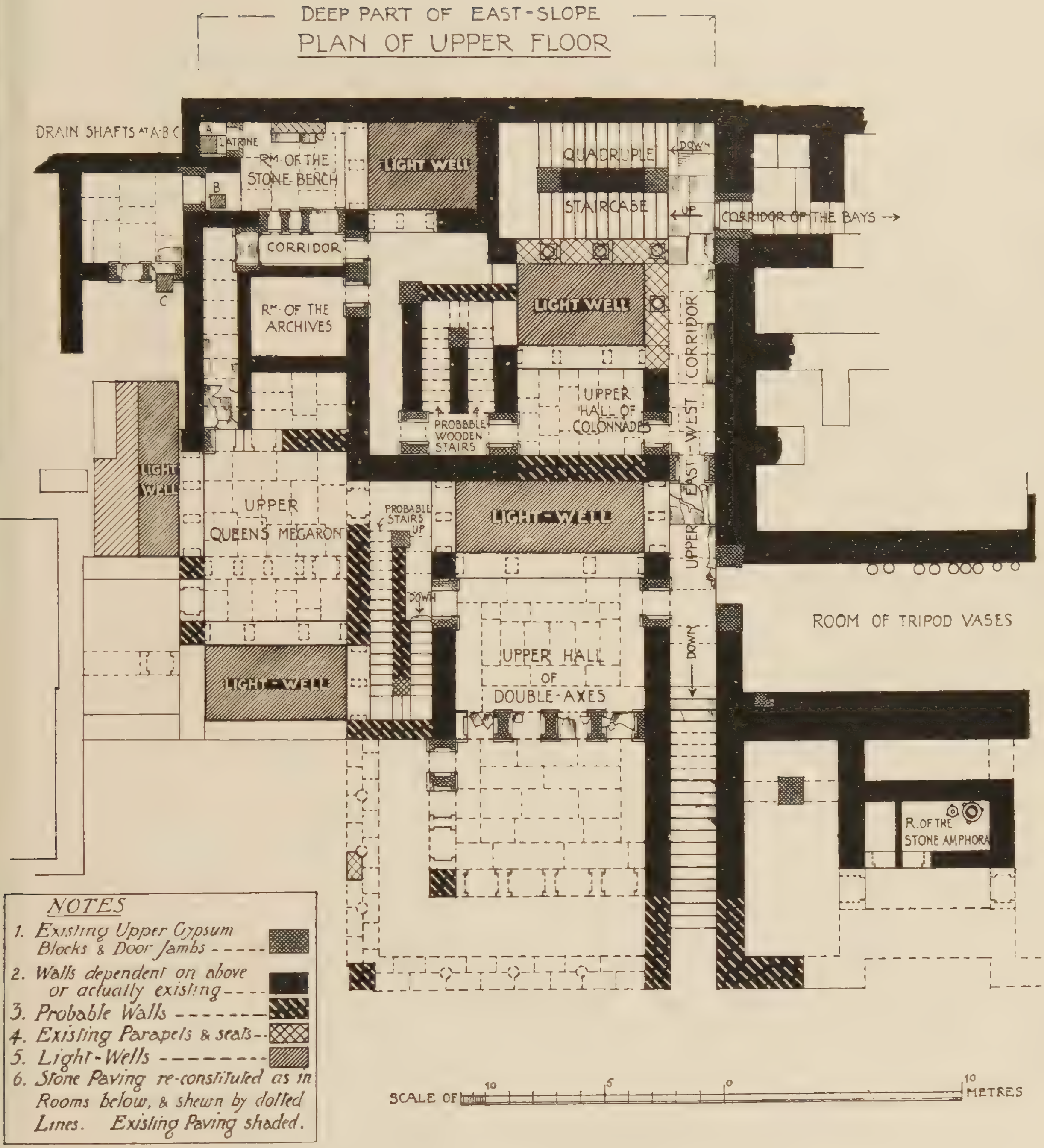


FIG. 30.—UPPER FLOOR PLAN OF DOMESTIC QUARTER AND ADJOINING HALLS.

however, that a spirited design of the upper part of a lady (Fig. 28) found at a low level in the neighbouring heap of detached plaster belonged to this space. The figure is about half the natural size, and seems from the way in which her tresses fly out in opposite directions to be engaged in somewhat energetic action, but her attire is not of the same masculine type as that of the female toreadors. She is clad in a jacket of the ordinary type, with a yellow ground and blue and red embroidered border, beneath which is a diaphanous chemise, its upper line showing clearly across the chest. Her left arm is bent and her right stretched forward. Her features are fairly regular, and a slight dimple is traceable at the corner of her lips, which, however, is hardly the *σεμνὸν μειδίασμα* of Archaic Greek art. She is possibly one of a group of dancers like those that appear with raised arms on one of the miniature frescoes. Unfortunately a part of the right arm, which might have afforded some clue to the meaning of the design, is missing, but it is not difficult to believe that figures such as this, surviving on the Palace walls even in their ruined state, may lie at the root of the Homeric passage describing the most famous of the works of Daedalos at Knossos—the 'Choros' of Ariadnê.

Of the character of the decoration of the back wall of the light court of the Megaron there can be little doubt. Of the heaps of detached pieces of painted stucco that lay along its line the most abundantly represented were derived from a great marine piece containing a large number and variety of fishes. The larger pieces of the design belonged to two dolphins and to a certain extent completed one another, one set belonging to the tail end, another to the head. Both these and the numerous smaller fry were most naturalistically rendered, and, though among the preserved fragments there were no flying fishes, there could be no doubt that the whole belonged to the same class as the marine fresco from Phylakopi.[1] The spirited character of the designs, the prevailing colours of the fish, blue of varying shades, black and yellow, the submarine rocks with their coralline attachments, and still more the manner of indicating the sea itself, proclaim identity of method. In both cases it was found advisable to reserve the different tones of blue for the fish themselves and to give their outlines greater relief by leaving the ground white, while at the same time the marine element was gracefully indicated by azure wreaths and coils of dotted spray. The spray and bubbles fly off at a tangent from the fins and tails, and give the whole a sense of motion that could not otherwise be attained. It is evident that the panel of similar fresco from the Melian site belongs to the Knossian School and may even have been imported ready-executed from Crete like some of the fine Palace pottery found in the same building.

---

[1] *Annual B.S.A.* iv. Pl. III.

The covering of the wall of the light area, facing the seat beneath the portico, with this marine design suggests interesting comparisons. The whole is the artistic substitute for a natural view, identical in intention with the landscape scenes that form such a favourite feature of the blind walls that shut in the smaller courts and areas of Italian villas, and which are supposed to cheat the eye with the illusion of a free outlook. On this side those seated in the adjoining portico might seem to see the fishes of the sea disporting themselves, while the flying bird of the area lighting the Queen's Megaron on the South may be taken to represent a fragment of a similar scene borrowed this time from the fields and woods.

## § 16—PRIVATE STAIRCASE FROM THE 'QUEEN'S MEGARON' TO *THALAMOS* ABOVE.

An interesting feature connected with the Queen's Megaron remains to be described. The right door jamb facing the entrance of the Dog's Leg Corridor, was found to have a double reveal indicative of a second doorway, the other jamb of which presently appeared. The fondness of the Palace architect for double doorways is conspicuous, and it seemed at first as if in this case this second portal was of a more or less decorative kind—leading perhaps to a small closet—the more so as the opening was partly blocked by a pier belonging to the wall of the adjoining corridor.

Even supposing that the upper part of the third door jamb, which consisted of wood and plaster, had been originally splayed back, the opening here could not have been more than 70 centimetres or rather less than 28 inches in width.

The surprising discovery was made, however, that this narrow opening nevertheless gave access to a stone staircase, affording a private means of communication with the upper-rooms. This staircase was 92 centimetres in width,[1] somewhat broader than its entrance and its lower flight was very well preserved. This consisted of a first flight of fourteen steps, a landing with three more, flanked by a square pillar, and an upper flight, originally consisting of nine or ten steps, of which seven were preserved. This upper flight led to a landing with a doorway, on the right of which both jambs were preserved, leading to the upper Hall of the Double Axes. The private staircase from the Queen's Megaron had the effect therefore of bringing this fine Upper Hall into the system of domestic rooms. The Upper Hall of the Double Axes had, in fact, no direct connexion with the more public Hall immediately below it, though it stood in communication with the Upper East-West Corridor.

---

[1] The steps had 36 cm. tread and 12 riser.

Beyond this doorway the staircase landing merged in a short passage above the Dog's Leg Corridor and thus gave access through a second doorway (no longer preserved) to the upper room or rooms above the Queen's Megaron. From this, in turn, an Upper Corridor, part of the pavement of which has been preserved, led West to the upper storey room of the Domestic Quarter to be described below. (See Plan, Fig. 30, p. 57.)

Near the point where the first floor landing-passage of the Private Staircase would have entered the 'Upper Queen's Megaron,' a sunken block was found which reveals an interesting fact. This block, which resembles one on the first landing of the staircase and other staircase-blocks found on the site, had sunk to the position in which it was found from an upper landing. In other words the staircase was originally continued to a second floor and there were at least three storeys in this part of the building.

In excavating the staircase a fine bronze chisel[1] was found together with fragments of fresco and a clay seal impression—a galloping bull with a fish below—a curious anticipation of the coin types of Thurii. The upper flight was partly choked with plain pottery belonging to the Re-occupation Period, including numerous pedestalled cups of the 'champagne glass' type.

## § 17.—THE BACK ROOMS OF THE DOMESTIC QUARTER: GROUND FLOOR. (SEE PLAN, FIG. 30, P. 57.)

Immediately South of the entrance to the Bath Room of the Spiral Fresco, another doorway, 87 cm. in width, leads from the Queen's

---

[1] 9·4 cm. long, 0·9 broad at edge.

Megaron to a corridor which brings it into connexion with the back ground-floor rooms of this Domestic Quarter of the Palace.

At the entrance of this corridor stood a large pithos, both in form and decoration different from any of the jars found in the various Magazines. It was shaped like an ordinary tub, and displayed a zone of continuous spirals broadly painted in black. It had been filled with lime and set in the position where it was found (blocking the passage way) at the time of the Mycenaean 'restoration,' but it is by no means so certain that the *pithos* itself belonged to this later period. The painted decoration recalls the jars of the latest pre-Mycenaean period, lately found in Magazines below the floor of the Great Megaron at Phaestos. The shape on the other hand suggests the tub-like receptacles for flowers and shrubs that appear on the background of certain scenes on Mycenaean gems. This painted clay tub had been placed for security on the upper ledge of the Southern light area of the Queen's Megaron, and it is by no means impossible that this ledge may have been originally adorned with large pots of this kind containing flowering plants.

The Corridor of the Painted *Pithos* runs under the passage already referred to as leading from the Upper Queen's Megaron to the rooms on the same storey at the back, and of which on this side one of the door jambs and part of the pavement was found in position. The lower gallery would have been quite dark had it not been for a window immediately to the left on entering, the masonry forming the East side of which is splayed back—the effect of the squint being to afford passage for the maximum of light from the 'Area of the Bird Relief,' on the extreme corner of which it opens. The corridor, finely paved with limestone slabs, is about 1·40 metres in width; the walls on the South side show good masonry, that on the North being of somewhat rougher construction. The original stucco covering has for the most part been stripped off from both walls. At the point where the passage makes a sudden turn to the North, however, remains of the fresco-coating were still visible showing a band of spirals[1] resembling that of the bath room, but without rosettes and placed at a lower level. It runs at a height of 78 cm. from the ground and is 50 cm. in breadth.

The fact that the Corridor of the Painted *Pithos* does not run straight from one room to the other, but has a short turn, or rather double turn, is very characteristic of the Palace architecture in this region, and has been

[1] See D. T. Fyfe, *Journ. R.I.B.A.* 1892, p. 111, Fig. 8.

already illustrated by the Dog's Leg Corridor. It seems to have been a device for insuring greater privacy.

At the North corner, where the short inner turn of the Corridor begins, was a square gypsum block and considerable remains of the timber frame of a flat arch about the height of an ordinary doorway, the masonry above which was found in position supporting the stone jambs and threshold of the corresponding turn of the Upper Corridor. The actual door to the inner room was not however at this point. Immediately beyond the arch the passage way was once more diverted by a partition wall of gypsum slabs, so that, to pass the door jambs that gave entrance to the room in question, it was necessary to turn once more to the right about.

The characteristic feature of the ground floor room thus approached, so far as concerns its interior arrangements, was an oblong platform of plaster-covered stonework in its S.W. corner, 1·50 metres in length by 0·80 in width. There can be little doubt that this was the support of some kind of bed or couch, and it recalls rectangular platforms of the kind in some of the Mycenaean Chamber Tombs at Phaestos, on which were found the skeletons of bodies laid out in the sleep of death. This 'Room of the Plaster Couch,' may therefore be regarded as having served as a bedroom. It was covered with a cement floor, except for one large slab in the middle of its Eastern border, with an aperture used for flushing a drain, to be referred to below.

This slab in fact was opposite the entrance jambs of a latrine, a description of which is reserved for a succeeding Section, in connexion with the drainage system of this quarter. Its South partition wall was that which had turned off the entrance passage described above. Beyond the North partition wall of this closet was another doorway, with remains of its wooden framework and red coloured stucco, giving access to a corridor leading by a double turn to the Hall of the Colonnades. The Eastern side of the room thus shows a succession of four limestone jambs and bases with reveals, originally surmounted by as many pillars supporting the upper storey. Three stone pillar bases of the upper storey answering to them in number, but not quite in relative position, were found compacted together by means of intervening pavement slabs forming a fine line of masonry, which, especially in its central part, had somewhat sagged down below its original level. This has been preserved (slightly raised, to its original level), by means of brick piers built above the lower pillar bases.

The South and West walls of the room were constructed of rubble masonry, but the North wall showed fine limestone blocks above and below. In the North-West corner was another doorway leading to a small court which served as a light area. To the right of this exit the upper limestone courses had sunk a good deal, and between them and the lower courses was a space filled with earth and rubble. This subsidence was due to the fact that the whole upper part of this North wall had been originally supported on wooden beams and pillars forming the frame-work of a large double window opening on to the Court, and thus giving sufficient light to the room. The limestone blocks above the original window opening were photographed and numbered in their relative positions and replaced at their original level above a new supporting wall, on the cement facing of which the form of the window was traced. The somewhat naive trust of the Minôan builders in the strength and durability of wooden supports at least bears witness to the massiveness of the timber employed. In the present case there was not even a flanking pillar of stone by the doorway as might naturally have been expected.

The walls of the Room of the Plaster Couch had lost their stucco covering, but the remains of a fine dado of gypsum slabs, 2 metres high and 1·20 broad, were visible round the South and West walls and above this a gap for wooden beams, which we may infer to have been originally marked by a painted frieze of spirals and rosettes like that of the adjoining Corridor and Bath Room.

The North-West door of the 'Room of the Plaster Couch' gave access as already stated to a small Court (4·50 metres North-South by 3·50 East-West) which serves as its light area. The walls of this Court, except the spaces reserved for the windows, were of fine limestone blocks with the usual gap for woodwork about 2 metres from the floor. Along the foot of the North wall was a projecting course, which seems, when coated with its original stucco covering, to have been used as a seat.

On the East Wall of this Court was a second double window like that looking out from the Room of the Plaster Couch, giving light, in this case, to an alcove and to the Corridor leading towards the Hall of the Colonnades. The dowel holes in the stones that formed the sill of this window, about 40 centimetres above the floor level, clearly showed how the wooden posts—two side posts and one in the centre—had been arranged. Considerable remains of these and the massive lintel above were indeed found in a carbonised condition amidst the debris which had worked its way into this opening and helped to support the limestone blocks above. It was thus possible to restore the whole framework of the windows, the somewhat sunken limestone courses above being raised to their original position (see Fig. 31).

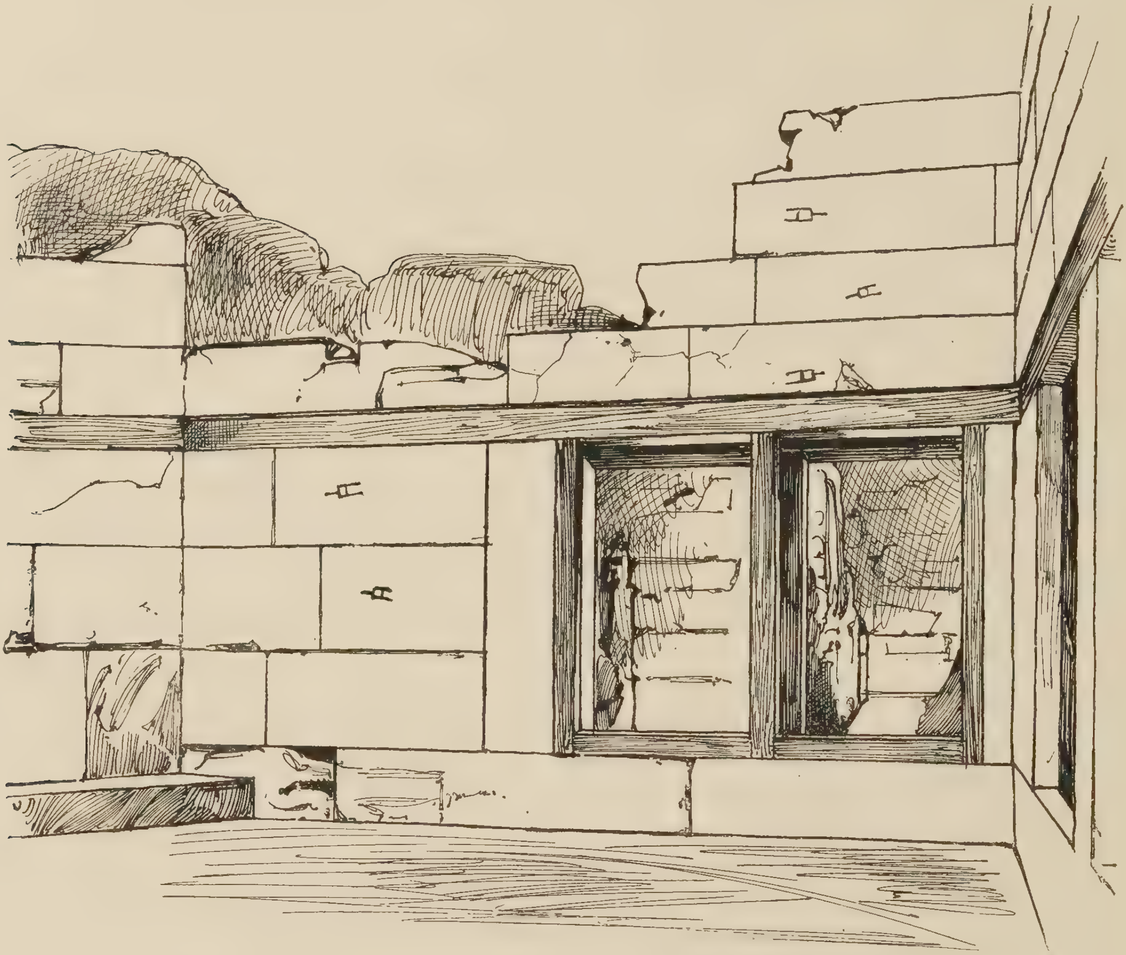


FIG. 31. — VIEW IN COURT OF THE DISTAFFS, SHOWING RESTORED FRAMEWORK OF WINDOW.

An interesting feature of the limestone blocks of this small Court was the repetition of a sign like a two pronged fork with two cross-lines between the prongs—sometimes reduced to a single cross-line—(Fig. 32 *c* and *d*). But this mark has a peculiar interest from the fact that it recurs in somewhat fuller and more realistic form among the signs of the pictographic Cretan series (Fig. 32 *a*, *b*). It is seen in this case accompanied by a sort of pendant and in my first account of the Cretan pictographs I had been inclined to regard it as some kind of *sistrum.* That is a possible view, but it seems to me to be more natural to regard it as a simple representation of a forked distaff with the thread and pendant spindle—a type of distaff which may still be seen in the hands of the peasant women in parts of Southern Europe.

The distribution of this sign on the Palace blocks is interesting. It only occurs in connexion with this 'Domestic Quarter.' It is frequently repeated on the South wall of the light-area of the Hall of the Colonnades above and below the double window looking into it from the back staircase of this region. It is found again in the Queen's Megaron on one of the door-jambs, the left on entering, leading to the private staircase, while the corresponding door-jamb on the right shows the Double Axe.

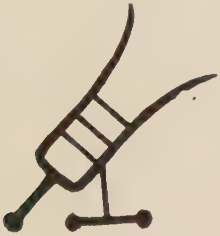


Fig. 32 *a.*

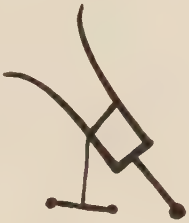


Fig. 32 *b.*

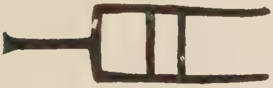


Fig. 32 *c.*

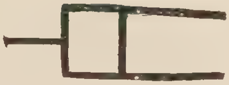


Fig. 32 *d.*

Can it be regarded as a sign of 'the spindle side' and a distinguishing mark of the chambers somewhat specially set apart for women? Or, if we are justified in believing that the marks on the Palace blocks have a consecrating value, can it be, like the distaff and spindle attributed to the Ilian Athênê, and perhaps the spindle whorls of pre-historic Troy, a sign of female divinity? Its association with the Double Axe sign, the emblem of the tutelary male divinity of the Palace, points that way, but in this case too it would be specially appropriate for the Women's Quarter.

From the repetition of this sign on the walls of the small court with which we are dealing, it has seemed appropriate to name it the 'Court of the Distaffs.' There is no reason, however, for supposing that in its finished state these marks—which *ex hypothesi* were a sign of consecration for the material, like the dedications on Babylonian bricks—were visible to the eye. It seems probable that in all cases the fine limestone masonry of the small courts that serve as light areas in the Palace was brightened by a coating of painted stucco partly perhaps reproducing the lines of the stone-work, like the earlier 'Oscan' style of wall-painting at Pompeii. At Phaestos the limestone blocks of the outer Western wall showed abundant traces of the red-coloured plaster with which they had been originally adorned.

Part of a male figure in painted stucco found in this Court, and the loin-cloth of another with a brilliant needlework design of flowers and network[1] that lay near the doorway of the adjoining room, as well as a bull's foot in painted *gesso duro*, seem on the other hand rather to belong to the decoration of the usual rubble walls of the interior rooms or galleries. For we should naturally suppose that the coloured ornamentation of good masonry would be architectonic rather than pictorial in character.

Somewhat above the original floor level both in the Court and in the adjoining Room of the Plaster Seat were found abundant remains of rough Mycenaean pots—many of them 'Stirrup Vases' with octopuses painted on them—belonging to the Period of Re-occupation. At a lower level were found pieces of better Palace fabric. The most remarkable ceramic find, made a little above the floor level of the Court of the Distaffs, was a fine glazed and painted fragment showing part of an inscription in three linear characters of somewhat exceptional form (Fig. 33). This inscription, painted on the vase with the rest of its decoration before the firing, recalls the inscribed vases of Classical Greece and is the only specimen hitherto known belonging to the 'Mycenaean Period.'

The doorway at the North-East corner of the Room of the Plaster Couch leads by a double turn—analogous to that in connexion with its South-East door—to a passage of about the same dimensions as the Corridor of the Painted *Pithos* on the other side, but with a cement floor in place of limestone slabs. This passage, lit by the Southern half of the window of the adjoining Court, passes on the left the opening of a rectangular alcove, the lighting of which was effected by the Northern half of the same window. This alcove was very probably reserved for attendants or guards.

---

[1] Fyfe, 'Painted Plaster Decoration of Knossos,' *Journ. R.I.B.A.* 1902, p. 128, Fig. 69, (but placed wrong way up).

Beyond this, immediately on the right, is a door giving access to what is undoubtedly the most secluded room in this quarter of the Palace, described below as the Treasure Chamber, to the contents and character of which we shall return. Some six metres further on, the passage takes a turn at right angles to the left, and passing a kind of store cupboard—that of the ivory statuettes—and the entrance to a back staircase (see Section 18) emerges, through a door-opening, on to the inner corner of the Hall of the Colonnades. Through this Hall access would thus be gained either to the Quadruple Staircase and Central Court or by means of the lower East-West Corridor to the small rooms beyond its Eastern end, occupied in all probability by slaves or attendants. This unpaved back passage from the Room of the Plaster Couch must have been largely used as the service passage to the Domestic Quarter of the Palace.

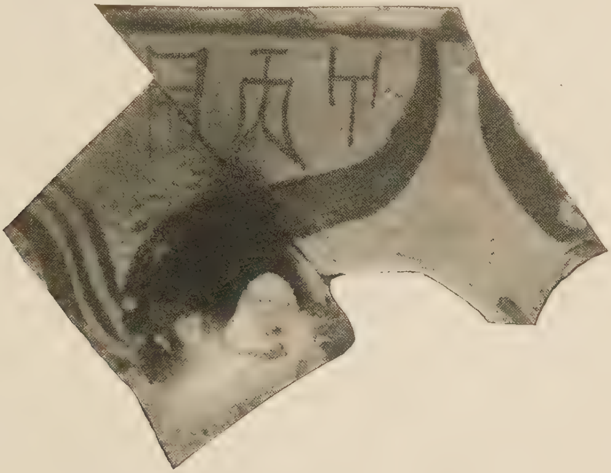


FIG. 33.—PART OF PAINTED VESSEL WITH INSCRIPTION.

Quantities of clay seal impressions, derived from the upper storey, were found above the floor level of this passage from near the door of the Private Treasury onwards. Near the entrance to the Hall of the Colonnades there also came to light some curious clay labels, repeating the same linear inscription and figures and showing the impression of thick string with prominent twisted strands running through them, which had doubtless served to secure large packages or bales.

Throughout all this section the walls of the Corridor, which ascended well above the upper floor level, were in a dangerous condition, necessitating the construction of two brick arches. In addition to this, stone pillars had to be built on each side of the doorway leading to the Hall of the Colonnades, above which were laid iron bars to support the upper walling.

## § 18. THE TREASURE CHAMBER AND THE DEPOSIT OF IVORY FIGURES.

The secluded room already referred to as opening off the back passage behind the Room of the Plaster Couch was certainly the inmost nook of this part of the building, and from the difficulties that beset its approach, and a certain mystery attaching to it, it was jocosely spoken of in the course of the excavations as 'the Lair.' Its upper part was choked with debris from a chamber above it of the same square form, containing a mass of clay seal impressions, an indication that archives had been originally deposited in this upper chamber. Above these again was a stratum full of broken stirrup vases and other 'Mycenaean' pots of the usual rough class, showing that, like the neighbouring upper rooms, it had been used as a store room for these vessels in the period of Re-occupation.

The room itself contained the evidence of a gradual rising of the floor-level, the upper level, which was of stamped earth, not very clearly marked, being 35 centimetres above a lower flooring. But the most interesting and unique feature was the foundation of this lower floor. It consisted of solid limestone blocks forming a bedding over the whole room and near the West wall roofing over a main drain. This solid if somewhat rough flooring suggests the idea that it may have been a precautionary measure against any one trying to enter the room from below by means of the large stone conduit. The level of this layer of limestone blocks was about 80 centimetres below the top of the stone bases of the door jambs.

Except for the doorway itself, there was no opening into the room, and it must have been quite dark. This circumstance explains the discovery on the lower floor level, near the South-West corner, of a pedestalled lamp of steatite of the usual Minôan class.

The possibility suggested by the seclusion of this chamber, and the solid blocks of the floor, that it was used as a repository for valuables—a kind of private treasury or wardrobe—was borne out by the finds made near the earlier floor level. Here, especially near the North-East and South-West corners, were found a variety of objects of gold, bronze, ivory, porcelain, rock crystal and other materials. The gold here found mostly consisted of quantities of thin plate or leaf, such as was applied to the surface of various materials by the Palace artificers. There was also found, however, a solid heart-shaped jewel with a perforation showing that it was used as a pendant (Fig. 34). It is of the same form as a Mycenaean amethyst gem, with an intaglio representing a flying eagle and possibly linear characters below, obtained by me from the site of Knossos in 1894,[1] and a similar pendant in cornelian came to light near the Olive Press Area.

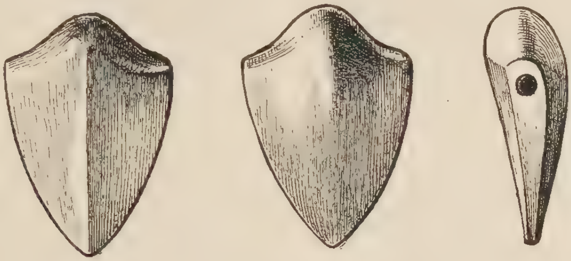


FIG. 34.—GOLD HEART-SHAPED PENDANT ($\frac{2}{1}$).

Among the other objects found in this deposit may be mentioned the following:

Bronze attachments (with gold plate adhering) and, below, carbonised wood, perhaps for a casket (see below Figs. 35-36).

Wing and leg of an ivory griffin, and head, apparently, of lion.

Fragments of ivory ornaments, including part of a bracelet covered with thin gold plate.

Parts of bull's head of 'porcelain' with gold tubes for horns and blue glass eyes.

Pieces of an ivory casket.

Porcelain plaques for inlay, a great variety, including rosettes, pieces resembling oval shields; others of A shape, several with marks and numbers on their underside.

---

[1] *Cretan Pictographs*, &c., p. 12 (281), Fig. 8.

Jasper pommel of a sword or dagger.

Part of a bowl of rock-crystal (see below).

Crystal plaques for inlaying.

Remains of carbonised wood perhaps belonging to a box inlaid with porcelain plaques.

Miniature bronze axes with gold plate attaching (see below p. 101, Fig. 58).[1]

Parts of diminutive bronze blades, perhaps representing swords, gold plate attaching.

Two small fragments of stucco with paintings in a miniature style; one showing part of a frieze with double axes, perhaps alternating with shields; the other a piece of a bull's head facing.

The last mentioned objects, notably the miniature Double Axes, look as if part of the treasure had been removed here from a shrine. It seems even possible, in view of the miniature temple of terra cotta, found in the Earlier Palace chamber (see above, p. 28 *seqq.*), that the miniature frieze with this sacred emblem belonged to a portable 'sacellum' with stucco decoration.

A still more important discovery threw further light on the character of the valuables originally deposited in this small 'Treasury.' Under the second flight of the back stairway (to be described below), there seems to have been a kind of closet, 1·15 metres wide, with its opening at the corner of the passage, about six metres beyond the door of the room with which we have been dealing. The front of the opening of this stair-cupboard was shut in below by a low stone breastwork, the top of which was about 85 centimetres above the floor of the passage. By the time of the Re-occupation, the lower part of the closet within this barrier had been partly choked with earth, and at about 70 centimetres from its original floor was traceable a second floor level, upon which were found several later Mycenaean amphorae and a stirrup vase with octopus decoration.

Below this later but still Mycenaean floor level was a stratum of deposit some 30 centimetres in thickness, covering the remains of vessels of the Later Palace Period, including a pedestalled vase with two vertical handles, identical, except for the absence of painted decoration, with a late Kamáres type found in the Palace of Phaestos.[2] Immediately below this deposit of 'Transitional Minôan' vessels there came to light the remains of a series of ivory figures together with other objects, showing that this had originally been one and the same deposit with that of the little Treasure Room already mentioned. There was here, for instance, part of a crystal bowl of which another piece that fitted on to it was found with

---

[1] One was found round the corner by the latrine.

[2] L. Pernier, *Scavi*, &c., 1900–1901. *Rapporto Preliminare*, p. 107, Fig. 39.

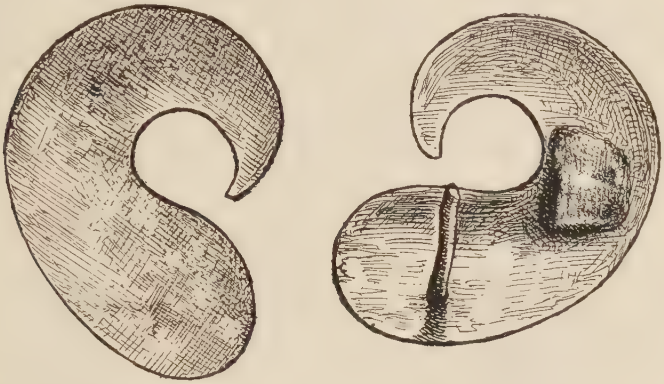


Fig. 35 *a* and *b*.—Decorative Attachment of Bronze, with Gold Plate attaching.

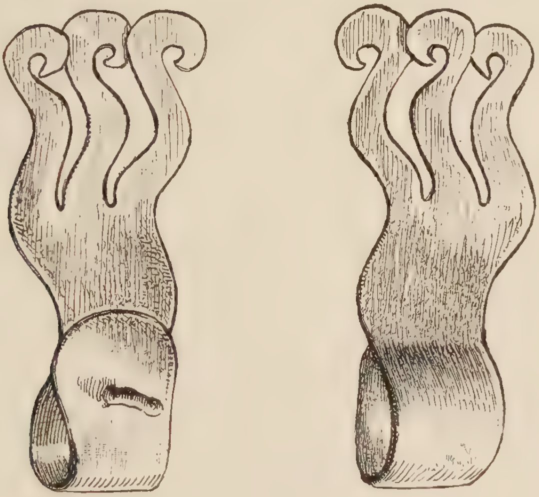


Fig. 36 *a* and *b*.—Decorative Attachment of Bronze, with Gold Plate attaching.

the other deposit. Here also occurred part of a set of fittings, perhaps from a casket, made of bronze in some cases partly overlaid with gold plate, with curved terminations—some suggestive of a mane—and nail-like projections for attachment on their under side, of which other examples were found in the neighbouring chamber (Figs. 35, 36). Similar pieces of porcelain inlay and an abundance of the same thin gold plate also came to light in this deposit.

Of much greater importance, however, were the ivories found, including, besides decorative pieces and an exquisitely carved wing of a bird, remains of human figures. When found these were in a very friable condition, but they were at once soaked in a solution of wax and paraffin at a high temperature, by which means a good deal of their original consistency was restored and their surface at the same time cleared of impurities.

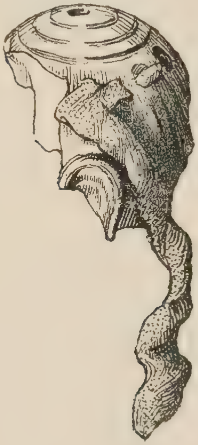


FIG. 37.—PART OF IVORY HEAD, WITH CURLING LOCK OF BRONZE PLATED WITH GOLD ($\frac{2}{1}$).

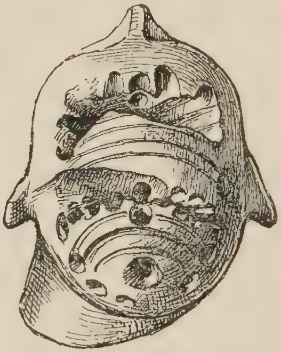


FIG. 38.—HEAD OF IVORY FIGURE, SHOWING HOLES FOR ATTACHMENT OF LOCKS OF HAIR IN BRONZE AND GOLD ($\frac{2}{1}$).

The most remarkable of these ivories belonged to a series of figures of youths—possibly in one case of a girl—each of whom apparently is in the act of leaping with extended arms and head thrown back. Only in one case (Plates II. and III.) was enough of the trunk preserved to admit of the reconstitution of the whole figure. The waist alone—which has been supplied by wax—was here wanting. It was evidently, as in all the Palace figures, very narrow, and a strong presumption arises that it was surrounded by a metal band. The thin gold plate found with the figures further suggests that the usual loin cloth, which was certainly not wanting, was supplied by its means. On this and other examples the hair was reproduced in a curious manner by means of curling bronze wires with remains of gold plating adhering to the bronze, several of which were found. Fig. 37 shows an example of one of these locks, somewhat corroded, still attached to a head. In Fig. 38 only the holes are shown. In this case there was evidently a row of shorter curls over the forehead. In several cases curving anklets and bracelets of the shape worn by the youths of the Procession Fresco are seen in relief round the ankles and wrists. The foot-gear consists of elegant shoes tapering to a slightly upturned point.

The figures were not cut out of solid pieces of ivory, the fore-arms being attached by means of joints and sockets in the manner illustrated by the specimen shown in Fig. 39. The height of the best preserved figure is 28·7 centimetres (about 11½ inches). From what has been said above it appears that these ivories were in a certain sense chryselephantine, and the question naturally suggests itself—was the ivory itself tinted? No trace of this is at present discernible, but the passion for colour is such an universal characteristic of Minôan Art, that it is probable that the male figures at any rate were originally stained of a ruddy hue.

The life, the freedom, the *élan* of these ivory figures is nothing short of marvellous and in some respects seems to overpass the limits of the sculptor's art. The graceful fling of the legs and arms, the backward bend of the head and body give a sense of untrammelled motion, to a certain extent attainable in painting or relief, but which it is hard to reconcile with the fixity of position inherent in statuary in the round. How were such figures supported? Not certainly by their taper feet or delicate fingers. It may be conjectured that they were in each case actually suspended from the girdle in a downward slanting position by means of fine gold wires or chains, recalling in this the *amorini* of Hellenistic jewellery and terracottas.

The naturalistic treatment of the individual parts of the body is quite in keeping with the animated appearance of the whole. The set of the arms and shoulders and the well-developed breast of the figure seen in Plates II. and III. point to careful physical training, and the slender limbs reveal great sinewy strength, though in some examples the treatment of the flesh is softer, and may, as suggested above, be due to a difference of sex. The arm represented in Fig. 39 gives a good idea of the fidelity in detail. While the development of the lower part of the biceps and of the succeeding supinator muscle are here well indicated, the extensors of the wrist and hand are shown in full action, and the veins of the back of the hand and even the finger-nails are minutely rendered.

These youthful figures are athletic—not to say acrobatic—in their nature, and certain parallels presented by the Palace wall-paintings, as well as by a series of gem impressions, seem to connect them in the most unmistakable way with the favourite sport of the Minôan arena—the bull-grappling scenes, of which the Thessalian *ταυροκαθαψία* may be regarded as a kindred survival.

It has been possible this season to reconstitute the remains of a fresco panel, exhibiting one of the scenes described, from the Chamber which apparently overlooked the Court of the Olive Spout, to which reference was made in the Report of 1901. This design reproduces a complete *tour de force* of the Palace Circus. A girl toreador in cowboy costume is caught under the arm-pits by the horns of a charging bull and is evidently in the act of being tossed. A youth, who seems already to have been thrown into the air, is seen performing a somersault over the animal's back, while a girl behind, perhaps intended to be standing in the middle of the arena, holds out both hands as if to catch the flying figure. In other cases, as most frequently on gems, we see various versions of the Tirynthian picture of the youth springing from above and seizing the bull's horns in cowboy fashion. It is probable that the ivory figures belong to one or other of these representations. The way in which, in two examples at least, the head and upper part of the body is thrown back closely recalls the acrobatic figure of the painted panel described, but the legs there are also both bent back, as in the execution of a backward somersault, whereas, in the case of the ivory, one is extended. It is to be noted that the flesh and muscles of the neck as shown in the separate head on Plates II. and III. indicate a downward position, and the youth reproduced on the same Plates must also be regarded as in the act of leaping down.

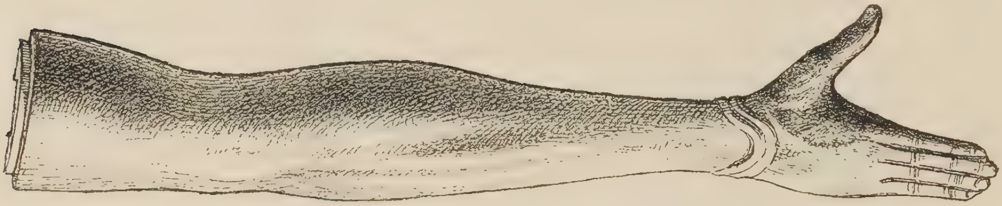


FIG. 39.—ARM OF IVORY FIGURE ($\frac{3}{2}$).

## § 19.—BACK ROOMS OF DOMESTIC QUARTER: UPPER-FLOOR. (THE WOODEN STAIRCASE AND ROOMS OF THE ARCHIVES AND OF THE STONE BENCH.)

The back Corridor mentioned above as leading from the Room of the Plaster Couch to the Hall of the Colonnades passes on the left, immediately before reaching the latter destination, the shell of what was beyond all doubt another staircase. This is enclosed in an oblong space, with a dividing wall between the two flights, leaving at its West end a space for the first landing. The gradual rise of the stairs is further marked by lower and higher cross walls built for their support and by landing blocks answering to those found elsewhere. The stairs themselves were in this case wanting and there is every reason for supposing that they were made of wood.

This wooden staircase was lit, so far as its first two flights are concerned, by the double window already mentioned as opening in the upper part of the South wall of the Hall of the Colonnades. Below the second flight of stairs was the closet that contained the precious deposit of ivories. At the top of this second flight to the left is another square landing block, and there can be little doubt that two more flights originally led up from this point to third storey rooms above. The landing to which this second flight of stairs immediately led gave access though a doorway—of which the two jambs remain *in situ*—to the room which originally existed immediately above the lower covered part of the Hall of the Colonnades. Like the room formerly existing above the Hall of the Double Axes, this too is thus linked on to the upper floor system of the 'Domestic Quarter.'

Several interesting fragments of decorative fresco, including part of a triglyph frieze, had found their way into the Northern division of the staircase, partly perhaps through the window opening on the adjoining Hall of the Colonnades, and it is probable that they had originally formed part of its ornamentation. A curious slab of porphyry-like limestone, of grotesque outline, perhaps part of a seat, was also found here.

Throughout this staircase area—for the most part above the level of the first landing—were found quantities of seal impressions, generally somewhat broken. By this time however the eyes of the workmen specially trained for this task had become so quick that very few fragments escaped their first examination of the earth and remained for subsequent detection by means of the sieve. This deposit of seal impressions was continuous with that of the adjoining corridor and extended thence to the upper strata of the neighbouring Treasure Chamber. In that case they had certainly fallen through with the collapse of the floor from the similarly shaped room answering to it above. On the other hand further seal impressions, together with some inscribed tablets referring to granaries, were found beyond the East wall of the same upper room and above the level of the balustrade of the adjoining Bath Chamber. It thus appears fairly certain that the centre whence these sealings were originally derived must be sought in this chamber which, like the Treasure Chamber below, was of the nature of a store-room, without any access or opening except a single door. At the time of the Re-occupation this, like other upper chambers near, had been used as a store-room for Stirrup Vases and amphorae of the usual 'mature' Mycenaean type, and it was probably owing to this that large numbers of seals or other earlier documents that had accumulated here were thrown out and found their way into the staircase and other adjacent nooks.

We may therefore regard this very extensive deposit of seal impressions—the most considerable yet found in the building—as having been derived from the room in question, which was evidently set apart for some kind of archives. None of these seals were countermarked like some of those found elsewhere in connexion with remains of chests containing deposits of inscribed clay tablets. On the other hand the broken condition of a large number seems to show that they were attached to documents, in many cases perhaps correspondence, inscribed on some perishable materials, such as the palm leaves, which, according to the Cretan tradition, served as the earliest material for writing.

The interesting discovery described in a succeeding Section (25) of clay cups containing for the first time ink-written inscriptions throws a new light on the character of these vanished writings.

The clay impressions include a great variety of subjects, many of which are repeated from the same seal.

Among the classes of subject represented may be mentioned the following:

Male Divinity between lions.
Seated Goddess, with lion in front on rock.
Lion-headed and other 'Daemons,' in some cases holding pointed vessel.

Parts of cult scenes and of a shrine with sacral horns.
Group of four double axes, symmetrically arranged (see Fig. 61, p. 103.)
Griffins.
Composite monsters, man-goats, &c.
Group of three warriors with 8-shaped shields, spears and peaked helmets (see Fig. 41).
Group of three shields of similar form.
Forearm and hand holding lily spray (see Fig. 42).
Lion and fluted pillar.
Boy milking cow.
Scenes of the *Taurokathapsia* (see Fig. 43).
Animals: sometimes in groups; a great variety.
Flying fish.
A 'school' of dolphins.
Grains of corn.

The small fragment of a seal impression given in Fig. 40 is of special interest, as it seems to contain part of the impression of a cylinder showing late Babylonian influence.

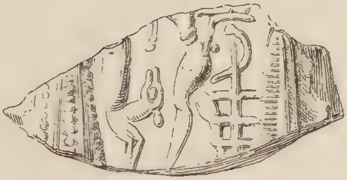


FIG. 40.—($\frac{3}{1}$.)

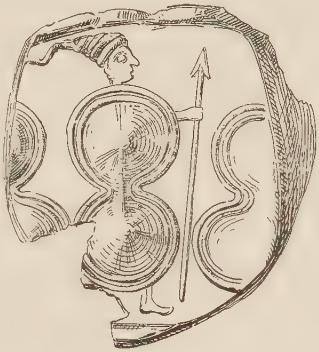


FIG. 41.—($\frac{3}{1}$.)

The consideration of the religious scenes and figures—notably the Dæmons—represented on these sealings must be reserved for another occasion. The groups of warriors, such as that shown in Fig. 41, give the best idea as yet obtainable of the military side of Knossian life—which in the Palace at least is by no means in the foreground. The pointed helmet, composed of various bands, recalls a small ivory helmet found on the West side of the Palace, but in this case no cheek-piece is visible; otherwise it recalls the head-gear of a warrior on the silver vase-fragment from Mycenae. The hand and forearm grasping a lily spray seen in

Fig. 42 has a curiously modern aspect. A bracelet is seen round the wrist. The male figure (Fig. 43) performing a backward somersault over the back of a galloping bull may throw a side-light on the ivories.

The staircase wall by the adjoining upper corridor had evidently, from the character of its material, been partly reconstructed at a late period in the history of building. Here, together with the usual rubble, were a number of worked blocks—some exhibiting sawn sections, consisting of Spartan basalt or *lapis Lacedaemonius*, a rock apparently unknown in Crete, which had been imported from Mount Taygetos for decorative purposes. This material seems indeed to have been a favourite one of the Minôan gem engravers.

The upper Corridor in question had originally followed the line of the passage below from the *thalamos*, already mentioned as built over the East half of the Hall of the Colonnades, past the stairs and the Room of the Archives. On passing the head of the wooden staircase, we found on this upper passage a second doorway, the stone jambs of which are preserved. At this point the passage turns, like that below, leaving on the left the door of the Room of the Archives and thus approaches a chamber of which there are considerable remains, situated above that with the plaster couch, and which, from its most conspicuous feature, is here called the Room of the Stone Bench. On the lower floor the course of the corresponding passage is broken by the latrine, here however it is continuous, passing the door of the Room of the Stone Bench and a double light opening from it marked by limestone pillar bases. In this way, through another doorway, both the jambs and stone threshold of which are well preserved (see Fig. 44), it reaches the Upper Corridor corresponding to the

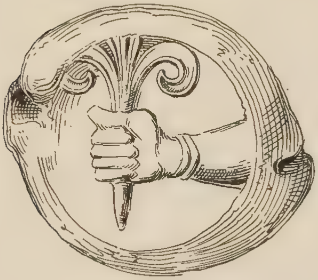


Fig. 42.—($\frac{3}{1}$.)

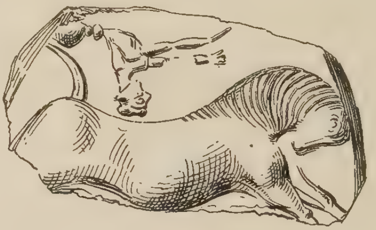


Fig. 43.—($\frac{3}{1}$.)

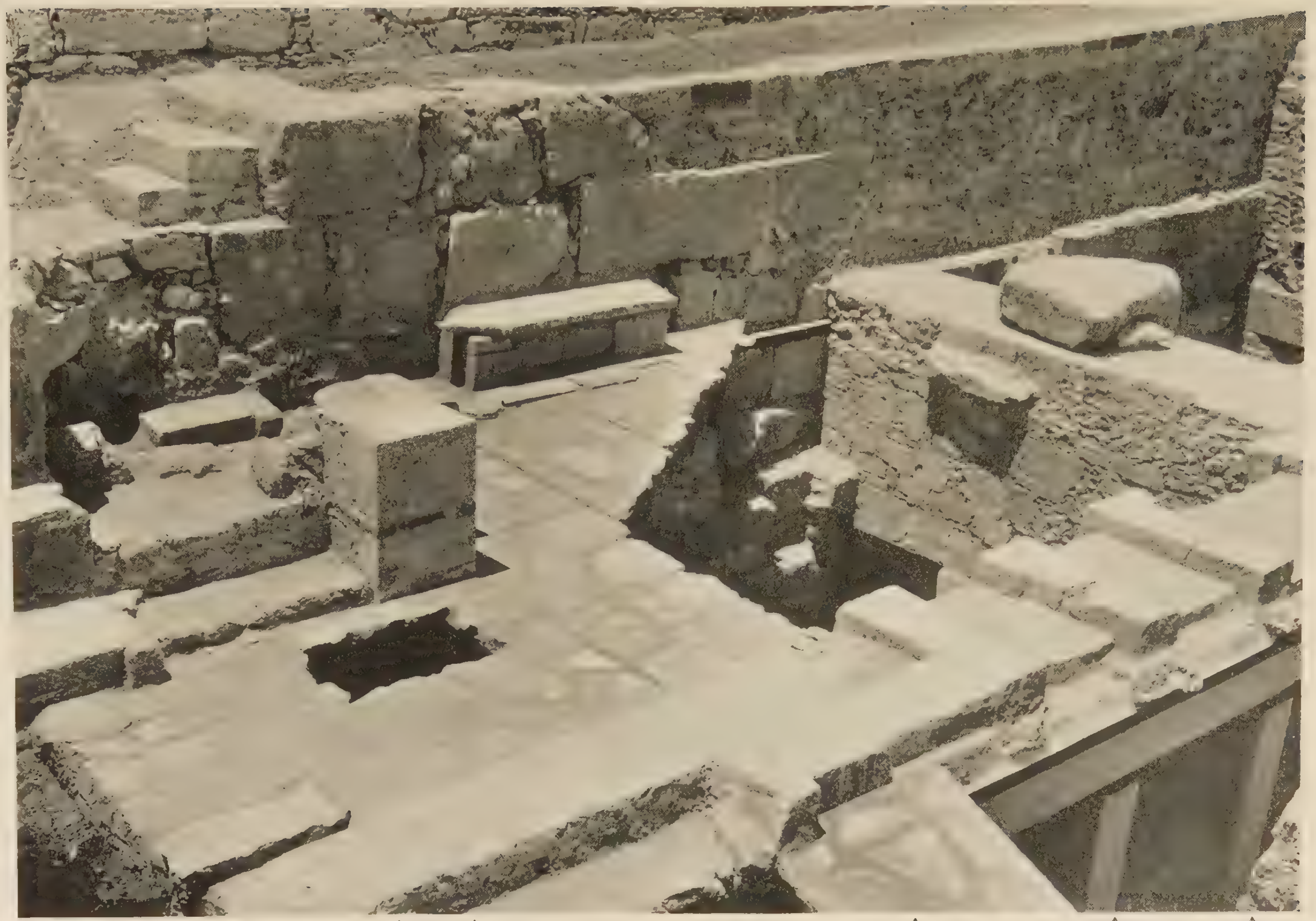

Upper Latrine.
Stone Bench.
Room of the Plaster Couch (below).
Court of the Distaffs.
Position of Shaft A and Upper Latrine.
Court of the Distaffs.
Jambs of Door leading from R. of Stone Bench to Upper Corridor.
Latrine (below).
Aperture in Pavement above Shaft B.
Door Jamb of Upper Corridor.
Brickwork Pillars made to Support Upper Jamb and Bases.

Fig. 44.—Room of the Stone Bench, showing Upper Floor Pavement partly in Position and partly Reconstructed.

lower section that contained the painted *pithos*, and finally emerges on the system of rooms above the Queen's Megaron.

On the East wall of this Upper Corridor, flanking the room of the Stone Bench, a good deal of the original red stucco coating was still visible. The Room of the Stone Bench doubtless derived its light from a double window looking on to the Court of the Distaffs and answering to that already described on the lower floor. Considerable remains of the slabs of the upper floor were here preserved, especially near the West wall, and here the stone bench from which the room has been named still stood at its original level (see Fig. 44). It has two pilasters on its front and resembles the benches of the Room of the Column Bases and of the Throne Room. It has been possible in part to reconstitute the subsided area of the pavement (Fig. 44).

It is noticeable that, since there was no occasion to reserve so much space on the Eastern side of this room as was below occupied by the door of the latrine, the single doorway communicating with the Upper Corridor is wider than that below, and the pillar bases thus do not correspond in position with those of the ground floor. The absence of the latrine on this side seems to have been made up for by a similar convenience in the S.W. corner of the room. There is an ascending step and doorway leading to a quite small closet from which a square stone shaft (A on plan, p. 82) descends to a drain passage below the level of the lower floor. There are strong reasons for believing that this shaft was originally continued to the level of the Central Court and received its surface waters on this side. It would be difficult however to assign any intelligible meaning to the small chamber which stands in such direct relation with the descending drain shaft, unless we suppose that it had an outlet into it for the passage of ordure or other waste materials. The closet seems in fact to have served as another small latrine.

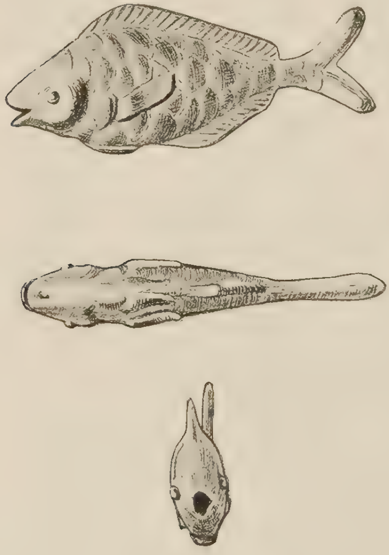


FIG. 45.—GOLD FISH (4/1).

On the South of the Room of the Stone Bench is a bay communicating by a doorway, both jambs of which are preserved *in situ*, with a small square alcove beyond. Beneath the floor of this annexe is a small square chamber, in the bottom of which opens another drain-shaft. This chamber could only have been approached by some kind of trap door in the floor above, marked in Fig. 44 by the break in the re-constituted pavement.

Finally, outside the double doorway of the annexe to the Room of the Stone Bench to the South, is another stone shaft going down to the drain below. Its mouth, which lay partly between the jambs of the Northernmost of the two doorways of the above room, was covered by a stone slab. Partly in the lower part of this shaft, which descends 5·3 metres, and partly in the neighbouring part of the cloaca below, were found the bone 'fish' for inlaying, with incised signs, many of them resembling the letters of the later Greek alphabet.[1]

Near the small upper latrine was found a gold-fish of very naturalistic execution, of which an enlarged representation is seen in Fig. 45. It is possible that this may have been taken from the Treasure Chamber.

## § 20.—DRAINAGE SYSTEM AND SANITARY ARRANGEMENTS OF THE DOMESTIC QUARTER.

In the whole structure of the Palace, nothing is more remarkable than the elaborate drainage system that runs throughout the 'Domestic Quarter,' and adjoining halls. The stone shafts, already mentioned as descending from the upper floors, lead down to a well-built stone conduit with flat covering slabs. Throughout the greater part of its course it is about a metre in height and half that width, so that a man can easily make his way along it. The inner surface of the conduit was originally coated with cement. A plan of the shafts and neighbouring drains is shown in Fig. 46, and a section drawn through shafts A and B appears in Fig. 47.

Two short branches of this system permeate the back rooms of the Domestic Quarter, one of which starts from immediately below the shaft marked A in the plan (Fig. 46), while the other leads from a section of wall between the Quadruple Staircase and the Hall of the Colonnades. Shaft A, as noticed in the preceding Section, was certainly constructed to receive the surface waters of the adjacent area of the Central Court, and it is probable that a shaft or pipe ran up the wall at the starting point of the other branch of the lower conduit, which by its means received the collected drainage of the roofs of the neighbouring halls and staircase. Both branches show a continuous gradual descent with an occasional step down.

---

[1] See *Report*, 1901, end.

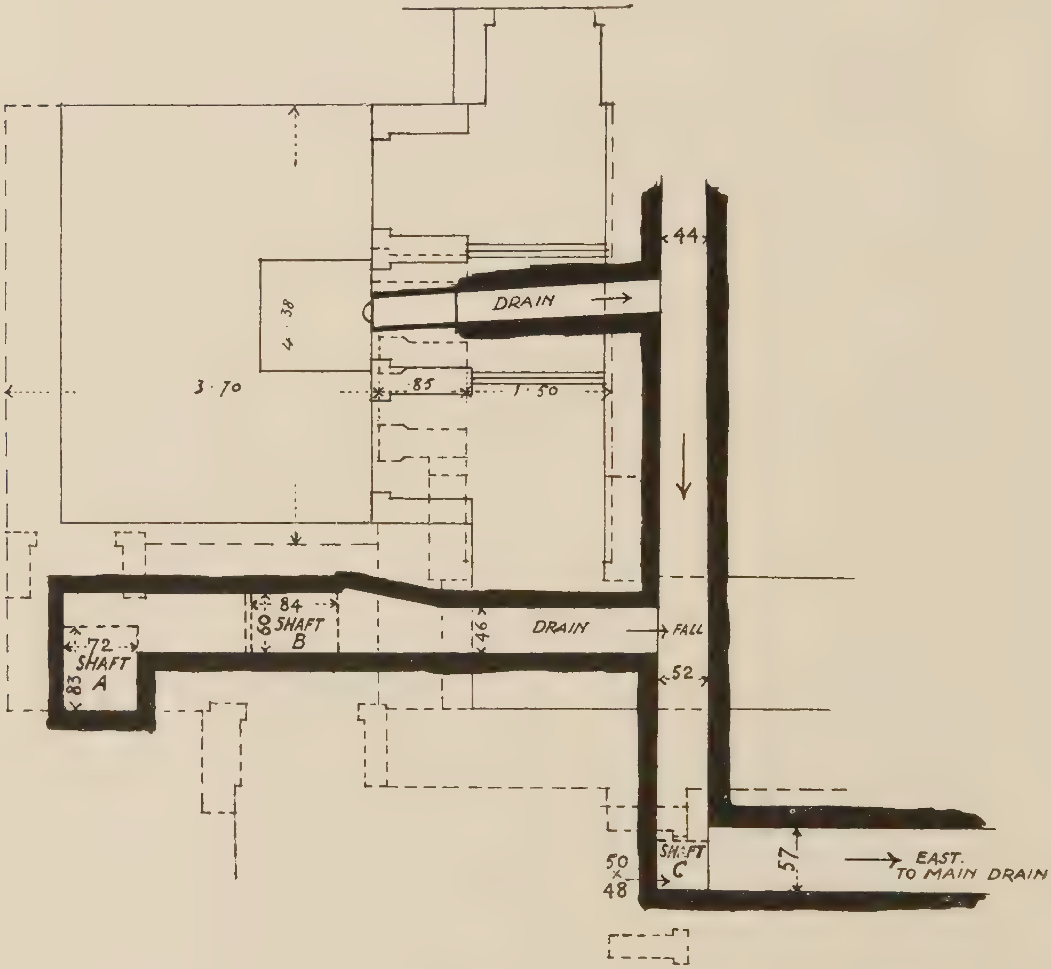


FIG. 46.—PLAN OF PART OF THE DRAINS, SHOWING POSITION OF SHAFTS A, B AND C.

At the point where C, the Easternmost of three shafts shown in the plan,—which may also have served at times as a man hole,—strikes the

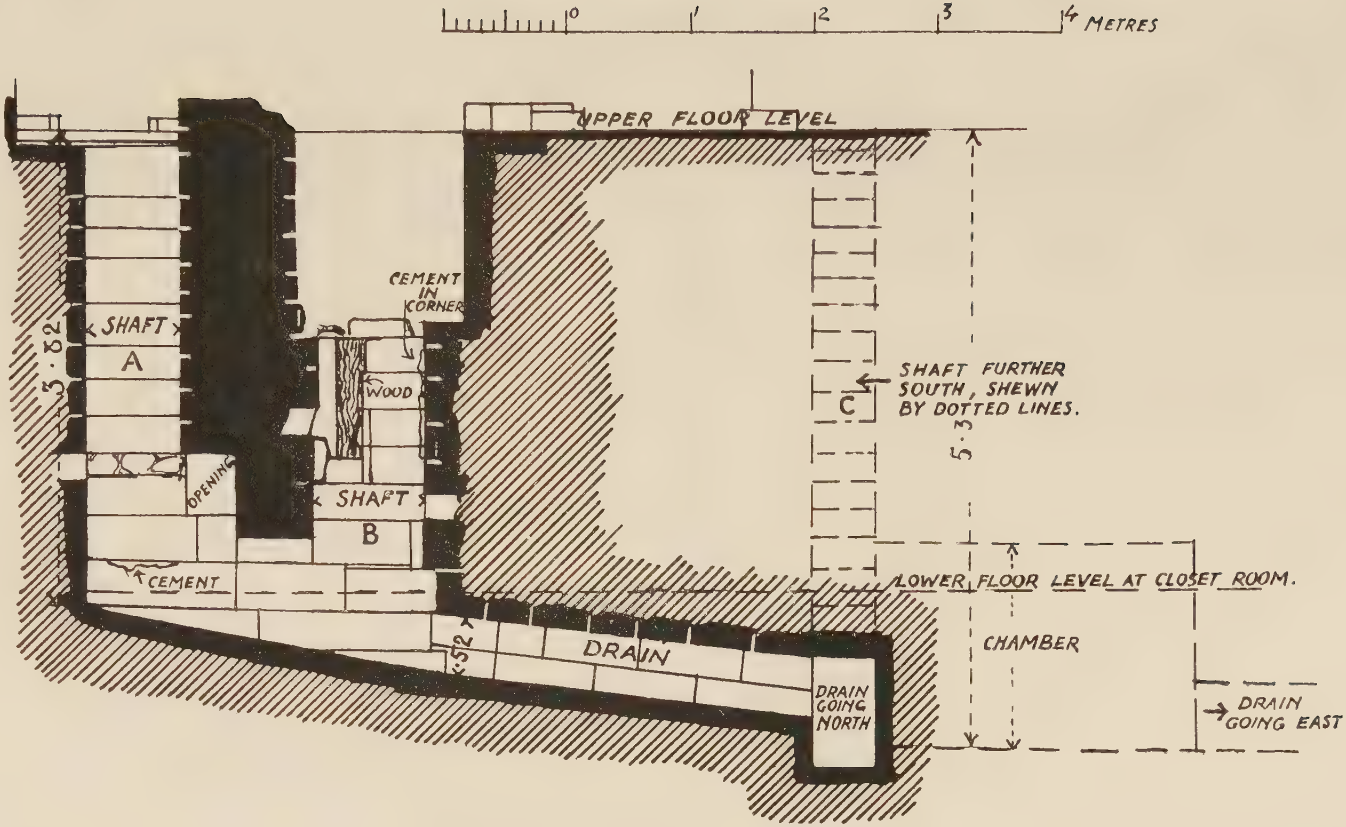


Fig. 47.—Section of Drain with Shafts A and B.

united course of the two short branches already mentioned, the stone conduit turns at right angles and continues in an Easterly direction, skirting the Southern borders of the Queen's Megaron, and the adjoining portico of the Hall of the Double Axes. Here it is joined by a tributary drain, the ultimate source of which was apparently the Court of the Distaffs, and which received in succession the drainage of the light wells of the Hall of the Colonnades and of the Double Axes. With each successive drainage area its capacity increases, and from the light well of the Hall of the Double Axes onwards, the passage is large enough for a man to crawl along it.

At a point about seven metres East of the S.E. pillar of the Portico of the Hall of the Double Axes another tributary stone drain runs into the main conduit from the North. In this Northern branch a quantity of painted pottery, of the finest Later Palace style, was found at the very beginning of the excavations in 1900.

Beyond this point the slope rapidly descends, and the further course of the main conduit is broken off.

In considering the elaborate drainage system of this quarter of the Palace, it is well to remember that its primary object was to afford a means of escape for the surface waters. The rains of Crete are often even now torrential, and in the Minôan Period, when the country no doubt was much better wooded, the rainfall must have been greatly in excess of what it is at the present time. The main conduit below the ground floor level of this Palace region answers both in structure and capacity to the large stone drain that runs down from the Northern Entrance Passage and which, beyond all possibility of doubt, was principally devised to effect a passage for the surface waters of that end of the Central Court. In the same way 'Shaft A' of the Eastern system received those that accumulated on this part of its area. So too the Northern of the two branches on this side seems, as we have seen, to have acted as a channel for the water collected from the roofs of the great adjoining halls.

The main conduits below were thus periodically flushed at times with a great force of water, and facilities were in this way afforded for the removal of ordure and waste materials. Of these facilities the Minôan architect skilfully availed himself by bringing into connexion with this system of surface water drainage various conveniences of a sanitary nature, some of which in their elaborate character can hardly find a parallel in the Ancient World.

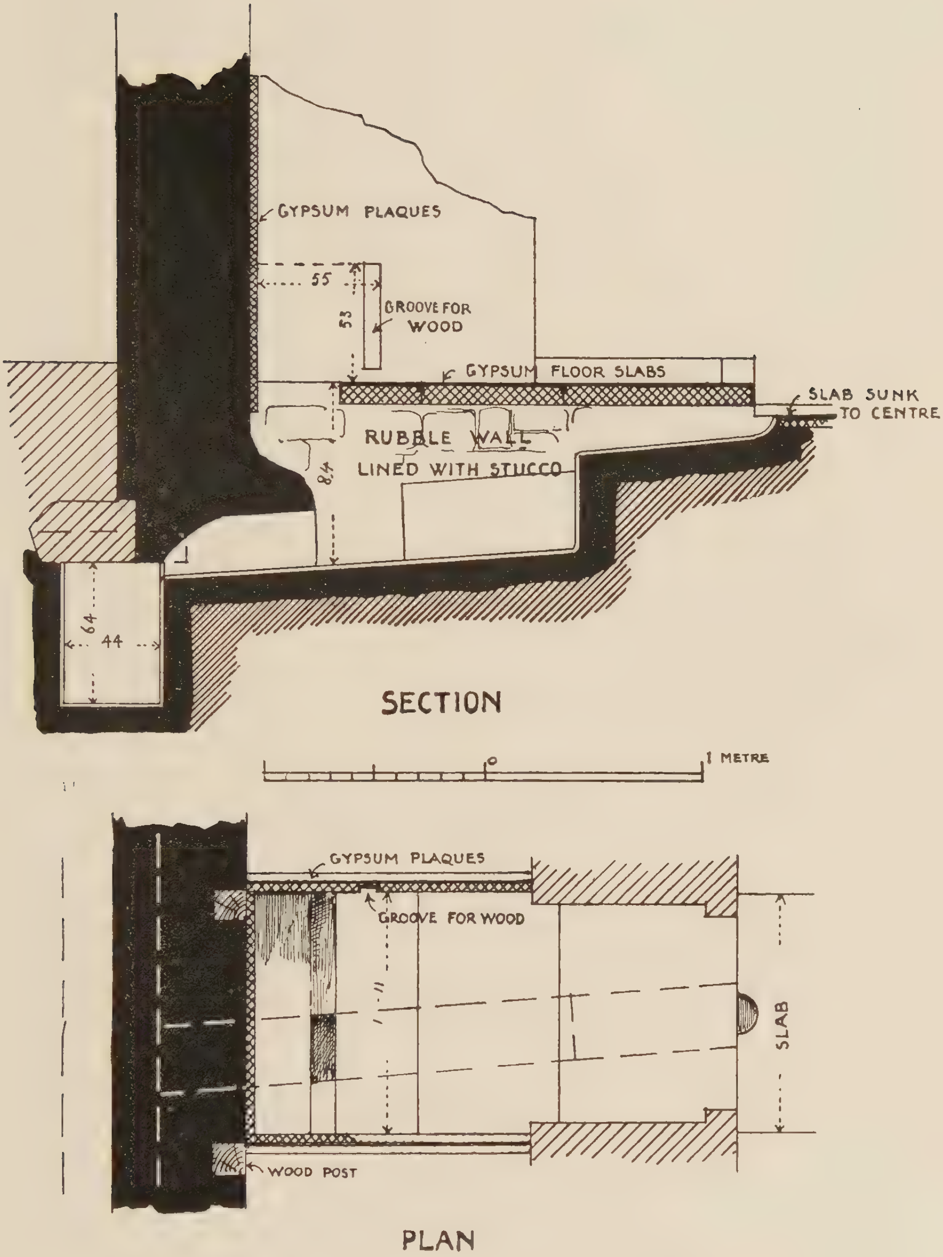


FIG. 48.—PLAN AND SECTION OF LATRINE.

It has already been noticed that shaft A passes on the second floor through a small detached chamber, which may partly be supposed to have served the purpose of a latrine. As to the usage to which shafts B and C were put, the evidence is not so clear; it may however be assumed that they served the purpose of modern sinks, perhaps in one or the other case in connexion with culinary preparation. The convenience of either as a man-hole giving access to the main conduit below is also obvious, the descent to it by this means, as I know by personal experience, being by no means difficult.

But the most elaborate structure in connexion with the drainage system is unquestionably to be found in the small closet, with its partition walls on either side consisting of double slabs of gypsum, that opens off the Room of the Plaster Couch. There can be no doubt that this small chamber served as a latrine.

The interior arrangement of this closet will best be gathered from the plan and section (Fig. 48). From the groove indicated in the wall-slab there seems to have been a wooden seat at the back of the compartment, apparently with a stone foot-rest in front of it like that on which the throne stands. The height of the seat moreover, allowing for its upper slab, would have been about 57 centimetres from the ground or, within a centimetre, the same as the throne.

Up to a little beyond the outer line of this seat, the latrine is paved with gypsum slabs, but beyond this limit the stone pavement ceases and this space seems to have been in part at least open, thus giving access to a drain passage below. This drain passage on the one side communicates by a small opening with the North branch of the main drain, on the other by a sloping channel with a hole in the pavement slab outside the closet door, which seems to have been made use of as a means of flushing this channel. It is to be observed that the entrance to the main drain is not below the middle of the seat, but on one side of it. It looks as if this asymmetrical arrangement was devised to leave a space on the other side of the bench upon which to rest a water vessel for flushing the main opening of what must certainly have been a latrine.

The curious curved projection coated with cement which juts forth from the wall immediately below this main opening is very enigmatic. It may almost be suspected that there was here a balance flap.

In any case it may be taken as certain that both the apertures were closed externally by slabs, like the drain-shaft C when discovered, to prevent the effluvia of the drains from penetrating into the adjoining rooms. In this connexion it may be observed that the high shafts such as those originally leading to the level of the Central Court and of the roof would have afforded excellent ventilation for the main drains, promoting as they must have done a constant circulation of air below. These main conduits were continually flushed during a great part of the year, and it must be remembered that, as in the case of the filling and emptying of the large bath basins, slave labour was probably available for clearing out the impurities from the passages during the dry season. The shafts, as already noted, formed excellent man-holes and the main drains are so roomy that two of my Cretan workmen spent days within them clearing out the accumulated earth and rubble without physical inconvenience.

## § 21.—THE PLASTER VASE CLOSETS.

Immediately South of the rooms of the Domestic Quarter with the descending shafts is an interesting group of small rooms with adjoining store-closets. The ground floor of these, as in the case of all this Southern zone, is on the higher level corresponding with that of that Olive Press and connected system on the North, and of the neighbouring upper rooms of the Domestic Quarter.

On the North border of this group of rooms are six steps of a narrow stone staircase[1] which must originally have led to the level of the Central Court. The upper course of this staircase ran above the end of an inner paved chamber with part of a stone bench remaining against its North Wall, and to which there is at present no visible access. On the floor of this room and in two adjacent chests or closets were found a series of vases belonging to the earliest period of the existing Palace, and tending to show that not long after its construction the chamber had been filled in or its access blocked.

A narrow passage, 60 centimetres in width, flanking the staircase, gave access to another smaller paved room which, from its square form and the remains of gypsum lining slabs attached to its walls, somewhat resembled one of the Palace bath basins. On the West side of its entrance was a small niche.

---

[1] The steps are 72 cm. wide, their riser 12, and tread 27.

The inner chamber was flanked on two sides by closets of a remarkable character. The exterior walls of these are thin partitions, composed of hard red stucco,[1] with a kind of terracotta plaster core—the whole only 12 centimetres, or about 4½ inches, thick. The more roomy of the two closets contained three large jars with a plain brown surface with white bands,[2] two of them characterised by a false spout on the rim—a special feature of the later Minôan pottery. An interesting discovery made on the opposite side of the valley shows that jars of this type were occasionally

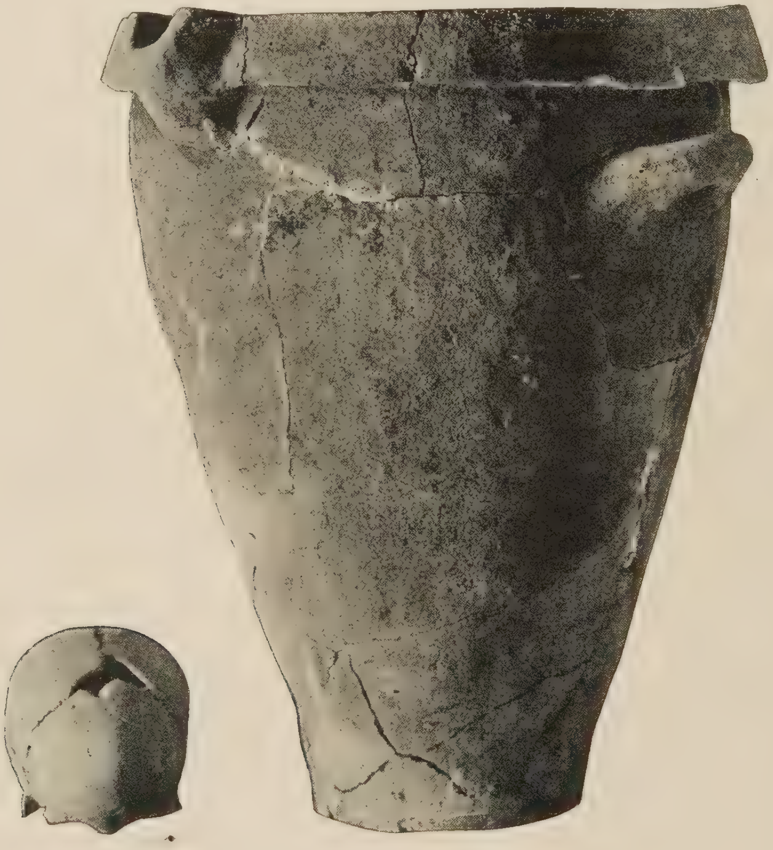


FIG. 49.—FALSE-LIPPED JAR USED AS COVERING OF AN INTERMENT, WITH SKULL. (Height, 58·3 cm. ; diam. 47·75.)

---

[1] ·06 in thickness.

[2] The taller of these is 1·10 metres high.

used for sepulchral purposes. The accidental circumstance of a cow putting its foot through its bottom, revealed the existence there at a spot North-East of the Palace, of a jar of precisely similar form (Fig. 49) which had been placed upside down in a round hole just sufficient for the purpose, above the remains of a child and a few smaller pots of a plain character. This as yet isolated discovery[1] is the only interment of the Palace Period that has as yet come to light on the site of Knossos.

Near these *pithoi* was an elegant one-handled vase (Fig. 50, middle), with white bands and traces of flowers and foliage on a purplish brown ground, 43 centimetres in height, while at various points on the pavement of the room itself were scattered other small vases, some of characteristic early form.[2] With them was also a steatite 'pyxis' and a triton shell.

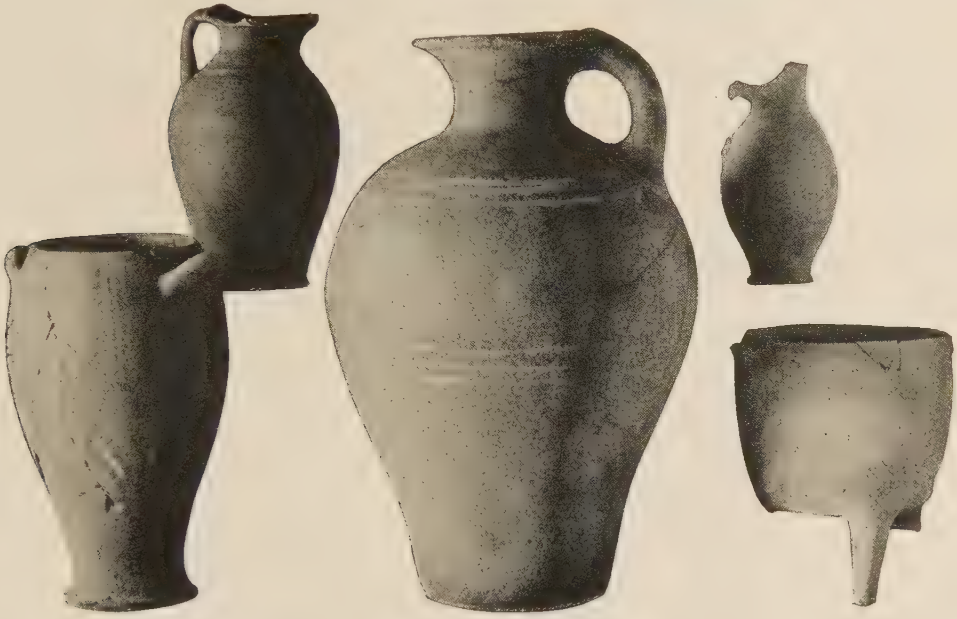


FIG. 50.—VASES FROM PLASTER CLOSET OF EARLIEST PERIOD OF LATER PALACE.

The contents of the other plaster chest were still more remarkable.

---

[1] Careful researches in the neighbourhood of this tomb did not result in the discovery of any further interments.

[2] *E.g.* a plain vase, shaped like those represented in Figs. 13 *a* and 13 *b* above—the commonest 'Kamáres' form.

It contained, besides the remains of a jar, resembling the above mentioned, with a 'false' spout on the rim, a whole collection of pots belonging to the same period, most of them well preserved, and a white marble bowl with four ear-like handles. Two of these vessels, a tall jar with four handles round its rim, and a kind of candlestick, to be described below (Fig. 51, 2, and Fig. 52), were in colour and ornament indistinguishable from the Late Minôan class of painted ware found in the basement room described above, together with the remains of the Terracotta Sanctuary. Their decoration consisted of white continuous spirals on a dark brown ground. It will be seen from this that the earliest ceramic fabrics of the Later Palace fit on without a break to those of the earlier building to which apparently the room containing the Terracotta Sanctuary belonged, and it will be remembered that the early pottery found in the 'Kaselles' shows the same affinities.

In the present deposit, however, as in the Kaselles, elements of transition are found which are not visible in the earlier Palace. In addition to the vases with the white spirals on a dark ground there came to light[1] a small bowl with a red continuous spiral on a buff ground (Fig. 51, 3) which, except that the surface of the vase was dull, recalled 'proto-Mycenaean' types.

The plaster chest also contained a number of cups preserving to a certain extent the outline of those belonging to earlier strata, though of rougher and heavier construction, with plain clay walls occasionally streaked or lined with black or blue showing a slight glaze.[2] Among other forms represented were tripods (Fig. 50) approaching those of the North-East Magazines, the wide mouthed jar (Fig. 51, 8), a jug with a single handle and elevated spout (Fig. 50),[3] an elegant vase with a quatrefoil outline (Fig. 51, 5), and a whole series of tall two-handled jars piled in nests, which, so far as form is concerned, also recalled a common type of the North-East Magazines.

These latter jars, as well as the quatrefoil vessel, presented a decorative feature already referred to as exhibited by the painted vase found in the other plaster closet. Upon the sides of these vessels, in the case of the

---

[1] This lay just outside the chest, but may originally have been contained within it.

[2] That shown in Fig. 51 is 7·3 cm. in height and 8·8 in diameter. Its ground colour is a warm buff with a dull surface, with black, slightly glazed streaks.

[3] 23 cm. in height.

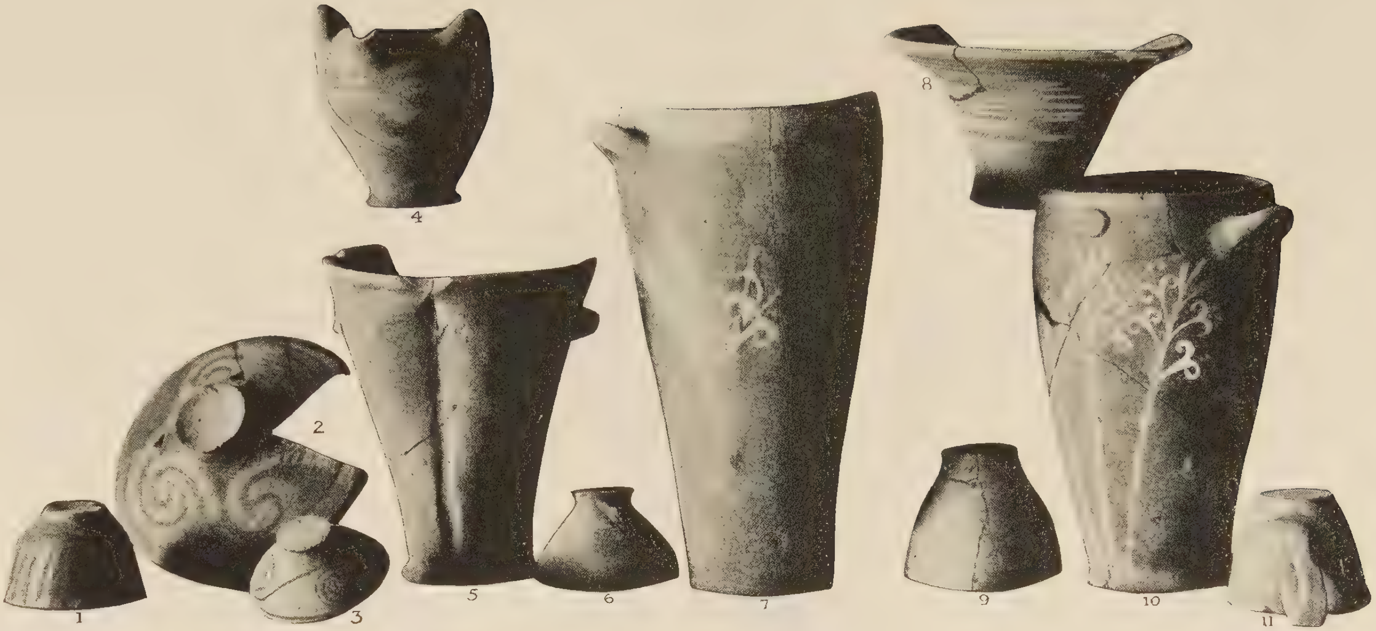


Fig. 51.—Vases from Plaster Closet of Earliest Period of Later Palace.

quatrefoil vase upon a purplish red ground, in that of the jars (see Fig. 51, 7, 10)[1] upon the terracotta surface of the pots themselves, sprays and groups of lilies, showing both the flowers and foliage, are painted in white in a most naturalistic fashion. These picturesque and beautiful floral designs, so freely drawn, represent the complete emancipation of the ceramic artists from the more geometric traditions of the earlier Minôan art, and become henceforth a distinctive feature of the Later Palace style. It is only in its latest phase that they show a tendency to be absorbed in a decorative conventionalism, intensified no doubt by increasing intimacy with Egyptian models.

The lily itself was the favourite Palace flower. On a fine fragment of wall-painting, found at the close of the present season's work near the South-East staircase, we have a glimpse of a whole field of lilies with white flowers and buds, yellow pistils and stamens and green foliage on a red ground, while, lest any natural touch should be wanting, the petals are in some cases shown half blown off by the wind. From the lily spray in the hair of the seated Goddess on the great signet ring from Mycenae, it seems probable that the flower had a religious association. In its more conventionalised form as a fleur-de-lis, we see it supplying the decoration of the crown and collar of the painted bas-reliefs and as a foot ornament of the youth of the Procession Fresco, who is in immediate attendance on 'the Queen.'

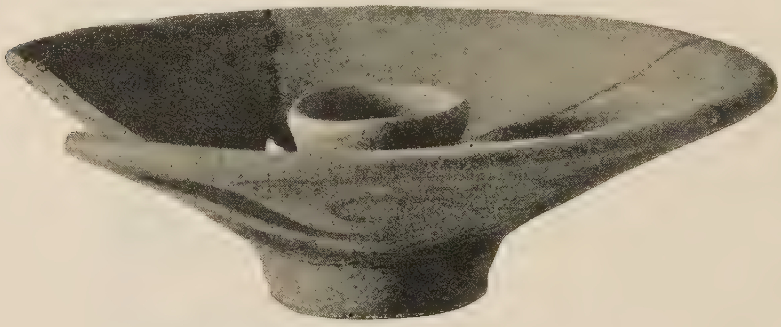


Fig. 52.—Painted Earthenware Candlestick from Plaster Closet.

Among the forms of vessel found in the plaster chest, that referred to above as a 'candlestick' is specially noteworthy. Its under side with the white spiral decoration is shown in Fig. 51; and the upper side with a socket, much resembling that of a modern candlestick, is seen in Fig. 52. Both the size of the object and the fragile character of the material show that it was not a torch holder and there can be no reasonable doubt that this, like certain analogous forms of classical antiquity,[1] was intended to hold some kind of wax candle. But the characteristic form and the expanding socket take us back to a much earlier parallel,[2] and the most literal prototype of this clay utensil, like those of so many of the Minôan stone vessels, is supplied by the old Empire of Egypt. Fig. 53 shows a sketch of a similar clay candlestick from a Fourth Dynasty tomb. Attention will be called, in a succeeding section, to the accumulating indications of a direct contact between Minôan Crete and early Dynastic Egypt.

---

[1] Fig. 51, 7, is 33 cm. high and has a reddish brown ground. Fig. 51, 10, is 25·5 high with similar ground.

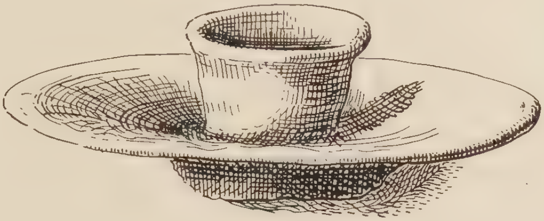


FIG. 53.—EGYPTIAN CLAY CANDLESTICK FROM FOURTH DYNASTY TOMB.

## § 22.—COURT OF THE SANCTUARY; SHRINE OF THE DOUBLE AXES, AND LABYRINTH FRESCO.

Both the rooms with the plaster closets and the whole upper system of the Domestic Quarter seem to have been approached on the South-East from an open Court of elongated form. The West side of this Court is flanked by a self-contained quadrangular block of small chambers through the centre of which runs a double gangway leading at its inner extremity into a corridor that runs round the Western and Northern sides of the block in question. The two parallel gangways that traverse the centre of this group of structures open on to the Court by a double doorway, immediately in front of which are the remains of a stone altar-base of the kind found elsewhere in the Palace. From the significant position of this altar-base and from the religious character of one at least of the chambers that stand in immediate relation to it, the elongated area in which it is situated has been here named the 'Court of the Sanctuary.'

---

[1] For examples of these, see M. Saglio's article 'Candelabra,' *Dictionnaire des Antiquités.*

[2] A somewhat analogous form of clay utensil, but with a larger socket, is found in Cypriote Tombs of the sixth century B.C. Others were found at Lachish.

The passages bounding the rectangular block of buildings to the North and West were both productive of interesting finds. In the lateral passage to the North were brought to light, above the floor level, a large number of perforated clay loom weights, more globular in form than those of the deposit from the earlier Palace rooms described above (p. 24), together with spools of the same material for winding thread. These had fallen from an upper storey room where the loom (*ἐργαστήριον*, as it was called by our workmen) must have been situate. We have here an indication of women's chambers.

In the back passage to the West—also above the floor level—were found a series of inscribed clay tablets, some of them well preserved, including two almost complete documents containing lists of men. Clay seals were also found with them, one, which had evidently secured the chest containing these personal records, countermarked with the 'Man'-sign. Altogether new was a class of tablets —two with complete and others with fragmentary inscriptions—referring to swords. The pictorial figures of the weapons on these tablets are of special importance as they illustrate two distinct forms of blade, one the old Cretan and Aegean type, triangular in form, Fig. 54, *a*, the other leaf-shaped, Fig. 54, *c*, besides a more or less intermediate class, Fig. 54, *b*. The presence of the leaf-shaped form in the Palace is of great interest, as there can be little doubt that it is of Northern origin. It is not too much to say that the whole chronology of the European Bronze Age is affected by this discovery, which shows that this leaf-shaped type of sword had

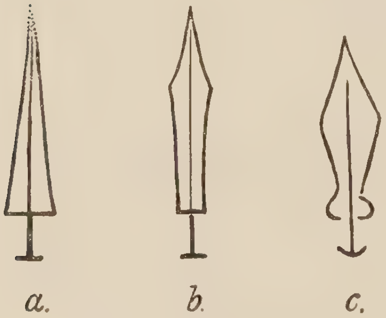


FIG. 54.—TYPES OF SWORDS INCISED ON TABLETS.

been developed before the approximate date of 1400 B.C. These tablets were probably derived from deposits originally existing in rooms of the upper terrace level, South of the Central Court, along the borders of which runs the passage in the upper strata of which they were found. On or near the paved floor-level of this passage occurred glazed pottery of the proto-Mycenaean ('Transitional Minôan') class. One is a high-spouted vase with spiral decoration recalling that of a 'funnel' vase with perforated bottom from the Second Shaft-Grave at Mycenae.

The double gangway opposite the altar-base communicates on the South with the small bath-chamber already brought to light in the course of an isolated excavation in 1901.[1] Five steps, flanked by a parapet ending in a pillar-base, descend to a square basin (2·20 × 2 metres). As noted in my previous Report this shallow basin must have been used in the Oriental fashion for washing the feet and it looks as if in this case it had performed a lustral function of a religious kind.

An opening in the central dividing wall of the double gangway immediately opposite the entrance to the bath gives access to its Northern passage, in which, a few metres further on, appear the stone jambs of a doorway leading to a small square chamber.

The passage off which this small chamber lay was paved with limestone slabs and opened, by a doorway with two gypsum jambs, into the 'Corridor of the Sword Tablets.' In both these passages the floor had risen 25–30 centimetres, so as partly to obscure the jambs of the doorway, and the same rise in the floor level was visible in the adjoining chamber. As pottery of good Palace Period lay on the original level, it seems probable that the higher floor level here represents that of the latest period during which this part of the Palace was occupied. This conclusion was fully borne out by the character of the ceramic types found in the adjoining room.

The small square chamber proved to be an actual Palace Shrine with the vessels of offering, votive figures, idols, and cult objects still in position as they were left when the site was finally deserted. The room itself was of very small dimensions—a circumstance quite in keeping with other indications as to the size of shrines of Mycenaean date. It was only one and a half metres square.

---

[1] See *Report* 1901, pp. 62, 63. The plan, Fig. 19, on p. 62 requires correction, the Northern passage of the double gangway not being blocked as there indicated.

The little Shrine was divided into three parts (see Plan, Fig. 55). The body of the room, with a plain stamped clay floor, was occupied by a variety of vessels standing in the position in which they had been left by the last occupants. Two of these, a tall plain jar with an oval mouth and a tripod pot, were practically indistinguishable from the ordinary rustic vessels of the good Palace Period. A stirrup-vase, however, with a good glaze and a painted design consisting of octopuses with conventionalised tentacles forming a kind of waved maeander presented a characteristic type of the later Period of partial occupation. A kind of bowl with a flat bottom and two upright handles, showing painted decoration in the shape of plain brown bands on an ochreous ground also belonged to the later ceramic class.

Beyond this area, where stood the larger vessels of offering, was a somewhat raised dais with a pebble floor, fixed in the centre of which was a plaster tripod with a slightly hollowed upper surface which had evidently served as a table of offerings (see Section, Fig. 55). In form and construction it recalled a similar object, which however was flat at top and seems to have been rather a stand than a table, found, with vases belonging to the good Palace Period, in a small store-room near the North-East Magazines. It was observable that the feet of the plaster tripod in the Shrine were embedded somewhat deeply in the slightly raised dais, and this circumstance tends to show that it had been already in position before the floor level rose to its present height. On the pebble dais on either side of the tripod were some cups and smaller jugs.

Immediately behind the dais and table of offerings a raised base about 60 cm. high ran from wall to wall. It was of clay and rubble construction with a plaster face much decayed, which it has been necessary to restore in order to keep the upper part from ruin. On the ledge thus formed were fixed two sacral horns of white coloured stucco with a clay core, and on either side of these stood a series of painted terracotta figures representing votaries and divinities (see plan, Fig. 55, and Fig. 56, *a*, *b*, *c*). The figures, though belonging to the mature Mycenaean period, showed, alike in their pose, the character of parts of their ornament, and their rude appearance, an old religious tradition. This was especially noteworthy in the case of a female votary, whose eyes, mouth, hair, and ornaments were rendered by means of punctures and triangular incisions filled with a white inlay, consisting of pounded gypsum, like the rude clay images from the

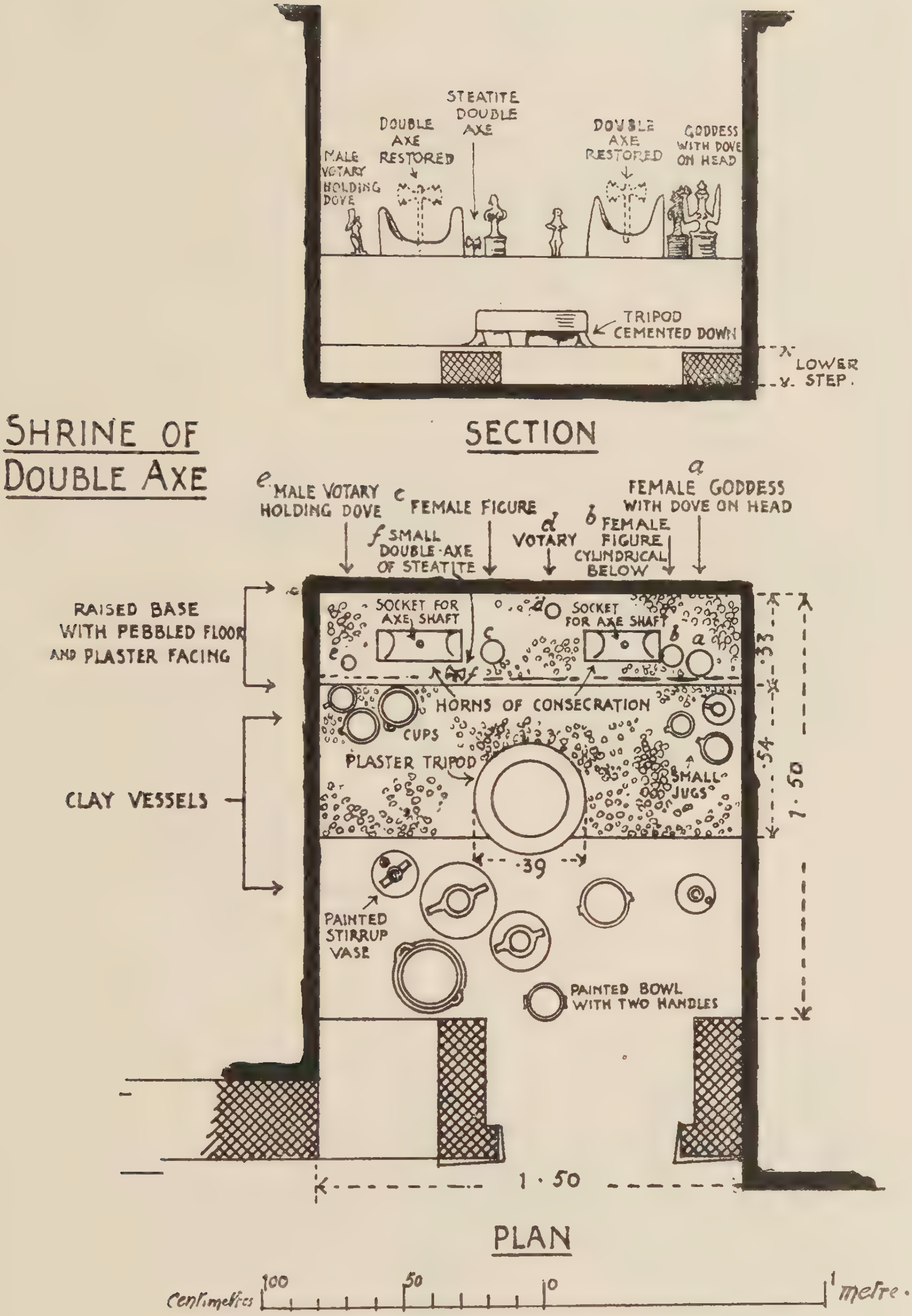


FIG. 55.—PLAN AND SECTION OF SHRINE OF THE DOUBLE AXES.

Neolithic stratum beneath the earliest Palace. Her arms, moreover, were clasped over the breast in the primitive fashion, while her half sitting posture also suggested a distant reminiscence of the Neolithic images of Knossos. The idols proper, three in number, were all of the female sex, of better fabric than the last described, and showing a slight glaze, like the contemporary painted vases. They are distinguished from the representatives of the votive class by the fact that they are only semi-anthropomorphic, the body in each case rising from a clay cylinder, which looks like a survival from the columnar form of the earlier 'baetylic' stones. Except for a small round hole the cylinders were closed below.

Two of these idols are of much the same type, though in one case the Goddess's head is turned on one side (Fig. 56, height 17·5 centimetres). The companion figure has a plant design painted on the back. A kind of pig-tail hangs down in each case from the back of the neck, and other locks are visible about the shoulders. The hands curve up over the breasts, as in the case of some figures from Mycenae. A type with a conical base, allied to these latter, extends to the Danube.[1]

The most remarkable of these images, however, is a Goddess with both hands raised, one palm outwards, the other in profile, each with a dark band drawn across it. She seems to be clad in a kind of bodice, and wears necklaces and armlets, while on either wrist is a narrow circlet with a disk like that on the wrist of the Cup-Bearer. The meaning of this disk is sufficiently explained in the painting by the indication of agate veins, and here as there it evidently stands for an engraved lentoid gem. Round the top of the cylindrical base runs a zone of curved lines, like a sucession of C's—a simple decorative motive which is very characteristic of the 'proto-Mycenaean' style of Knossos, and on which in turn it was taken over from the 'Middle Minôan' ware of the earlier Palace.[2] The figure is 22 centimetres in height.

But the most interesting feature of this image remains to be described. On the head of the Goddess, just as on the fetish columns of the more ancient Sanctuary described above,[3] is settled a dove. I have elsewhere pointed out the religious importance of such conjunctions as indicating the

---

[1] Compare the figure in the Belgrade Museum found near Kostolatz (S. Reinach, *La Sculpture en Europe avant les Influences Gréco-Romaines*, p. 31, Figs. 78, 79). It was found with a bucchero vase of Bronze Age character showing spiral reliefs.

[2] For an example see above, p. 27, Fig. 13 *b*.

[3] See p. 29, Fig. 14.

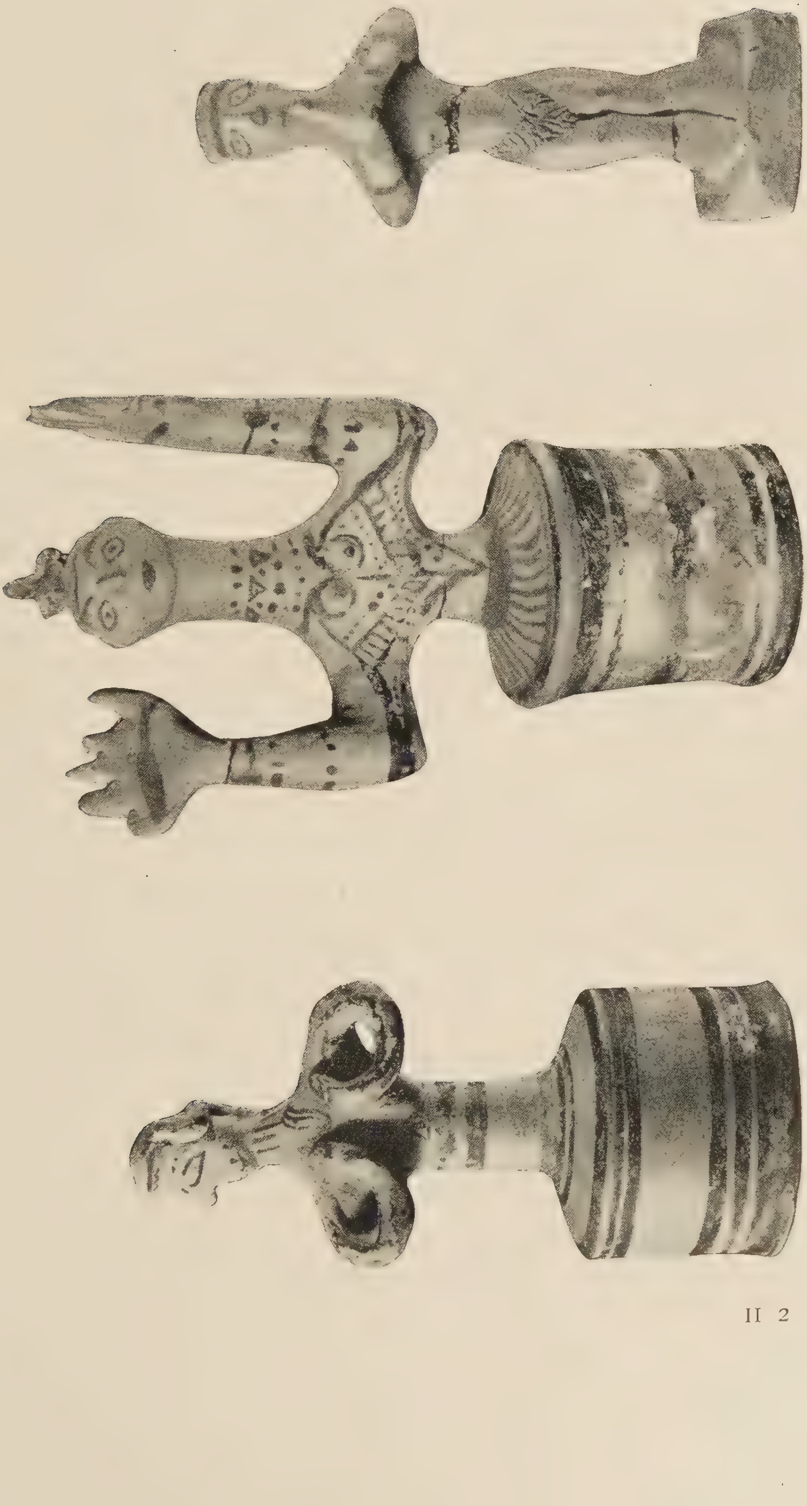


Fig. 56.—Idols and Votary of Painted Terracotta from Shrine.

descent of the divine spirit on the earlier baetylic object of worship.[1] Here we see the dove-sanctified column become a 'Dove Goddess,' analogous to the gold figures found at Mycenae, the cylindrical base, however, in the present case preserving a record of the earlier columnar form. It is the same old Minôan cult in gradual course of transformation.

In direct relation with the Lady of the Dove stands a male figure, 17·2 centimetres in height, found on the opposite side of the base, who is holding out a dove as if to offer it to the Goddess, and must evidently be regarded as a votary. He stands on a small flat base and wears a loin cloth, recalling that of some votive bronze figures from the Dictaean Cave, and what looks like a tunic, laced behind. The figure is of solid clay, the colouring reddish-brown on a pale ochre, but with no trace of glaze.

But the central objects of cult in this small shrine were of the old 'baetylic' kind, to which even the semi-anthropomorphic images seem to have been subsidiary. The stucco horns representing the familiar cult objects elsewhere described by me as the 'Horns of Consecration,'[2] and which, as we have seen[3] from the examples supplied by the terracotta Sanctuary, go back at Knossos to the date of the earlier Palace, are the regular accompaniment of the most ancient objects of cult. They appear at the base of Sacred Trees and Columns, and—what is still more pertinent in the present connexion—the sacred Double Axe is also seen rising from between the horns of this cult object, as elsewhere from between the actual horns of a bull's head. In my monograph on the *Mycenaean Tree and Pillar Cult* a design is reproduced from a painted vase found at Old Salamis, in which a double axe rising from 'Horns of Consecration' is seen between two bulls' heads with similar axes.[4] Since then a remarkable illustration of the same ritual practice has been supplied by a painted larnax found at Palaeokastro, Crete,[5] upon which the sacral horns with the Double Axe are seen rising from a slab with columnar support, the fetish pillar and weapon being thus combined.

That the pair of sacral horns on the raised base of the Knossian shrine served the same religious purpose as those depicted on the 'larnax' and the vase is made evident by the following circumstance. Midway between the two horns in each case is a round socket for the shaft of the axe, and lest there should be any remaining doubt as to the character of the cult here represented, a small Double Axe of steatite (Fig. 57) was actually found resting against the left pair of horns. The miniature dimensions of this weapon preclude the possibility of its having been one of the pair set up in the sockets of the horns. These were doubtless of bronze, gold plated perhaps like the small double axes found in the neighbouring Treasure Chamber (Fig. 58), and, like almost all objects of metal, would probably have been carried off at the time of the final desertion of the site.

---

[1] *Mycenaean Tree and Pillar Cult*, p. 7 (*J.H.S.* 1901, p. 105), *The Dove Cult of Primitive Greece*. In another form we see a survival of this bird-inspiration in the Eagles carved above the twin pillars of the Arcadian Zeus Lykaios (*op. cit.* p. 29 [127], or the Eagle engraved on the conical black stone of the Mountain God of Emesa, as seen on the coins of Helagabalus.

[2] *Mycenaean Tree and Pillar Cult*, § 15.

[3] See above, p. 30 *seqq.*

[4] *Op. cit.*, p. 9, Fig. 3. [*J.H.S.*, 1901, p. 107.]

[5] Found by Mr. I. H. Marshall, to be published in the present volume of the *B. S. Annual.*

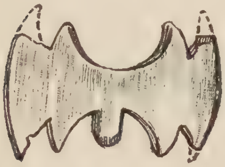


FIG. 57.—MINIATURE DOUBLE AXE OF STEATITE FROM SHRINE (*slightly enlarged*).

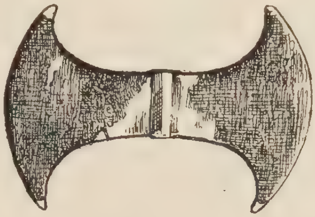


FIG. 58.—MINIATURE DOUBLE AXE OF BRONZE WITH GOLD PLATE ATTACHING (*slightly enlarged*).

The small axe of steatite may be regarded as having a votive significance in the sense in which small images—in this case a fetish image—can be offered to the divinity. Its reduplicated ends are an interesting feature, and, like the pair of sacral horns, suggest a dual cult. It will be remembered that a similar reduplicated double axe appears in the field on the great signet of Mycenae between the seated Goddess and the descending warrior God.

The presence of the female idols on the same base as the Sacral Horns and Double Axe seems to show that this symbolic weapon was associated here with the cult of a Goddess as well as a God. A roughly engraved steatite lentoid found near the Court of the Oil Spout shows in fact an axe of the same reduplicated form in the hands of what appears to be a female divinity (Fig. 59). An interesting mould of schist found near Siteia in Eastern Crete[1] exhibits moreover in addition to Sacral Horns and two Double Axes with curiously cuspated sides—perhaps an outgrowth of the 'reduplicated' type—two figures of what again seem to be female divinities, each of which holds a Double Axe aloft in either hand. The accumulating proofs supplied by signets, gems, and seal impressions of the cult of a divine pair in Minôan Knossos, not infrequently associated with lions, make it probable that the cult of the Cretan Zeus was here linked with that of Rhea, the ruins of whose temple with its sacred Cypress Grove was pointed out at Knossos in later days.[1] The Double Axe, the proper emblem of the male God, was also common to the Goddess —just as in Asia Minor it survived in the hands of the Amazons—and there are indications that of the two it was Rhea who took the precedence in Minôan cult. This is quite in keeping with the surviving Cretan traditions of Rhea and the infant Zeus.[2]

---

[1] S. A. Xanthondides, Ἐφ. Ἀρχ., 1900, p. 26 *seqq.* and Plates 3, 4.

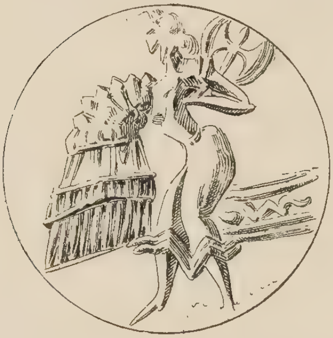


Fig. 59.—Goddess with Double Axe on Steatite Lentoid ($\frac{3}{1}$).

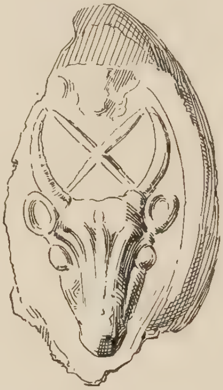


Fig. 60.—Clay Seal Impression showing Double Axe between Horns of Bull ($\frac{3}{1}$).

In addition to the evidence supplied by the small Shrine, a whole series of recent finds within the Palace has brought the exceptional sanctity of the double-axe into additional relief. Mention has been made of miniature axes of gilt bronze from the Treasure Chamber, and of the seal with the axe-holding Goddess. An interesting seal impression from the Court of the Oil Spout shows a bull's head with the sacred emblem worked in between its horns (Fig. 60), while on another impression from near the Room of the Archives, four double-axes are seen symmetrically grouped round a central rosette (Fig. 61). Fresh examples of Mycenaean pottery of the Palace style occurred on which ornamental figures of the Double Axe take the place of the ordinary decorative motives. In the rubbish heap of the South-East Court bordering the Court of the Sanctuary, moreover, fragments of clay vessels belonging to the earliest period of the existing Palace were found with this religious symbol incised on their handles.[1]

---

[1] Diod. *Lib.* V. c. lxv. 1.

[2] In *Mycenaean Tree and Pillar Cult*, p. 70 [*J.H.S.*, 1891, p. 168], I had already ventured to remark: 'It is probable that in Mycenaean religion as in the later Phrygian the female aspect of divinity predominated . . . The male divinity is not so much the consort as the son or youthful favourite. The relationship is rather that of Rhea than of Hera to Zeus, of Adonis rather than of Ares to Aphrodite . . . the God is either in the background as on the great Akropolis ring or holds a secondary place, as when he approaches the seated Goddess.'

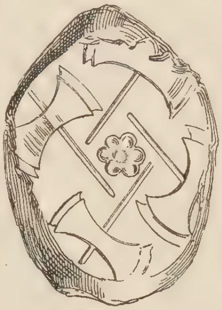


FIG. 61.—CLAY SEAL IMPRESSION WITH FOUR DOUBLE AXES ($\frac{2}{1}$).

The overwhelming evidence now forthcoming of the importance in the Palace cult of the Double Axe, the Carian *labrys*,—emblem of the kindred Zeus of the Asianic regions—must be taken to supply strong support from the archaeological side for the connexion suggested by Kretschmer and Max Meyer on philological grounds of *labrys* and *Labyrinthos*. That the *labrys* symbol should be the distinguishing cult sign of the Minôan Palace makes it more and more probable that we must in fact recognise in this vast building—with its maze of corridors and chambers and its network of subterranean ducts—the local habitation and home of the traditional Labyrinth.

That the Labyrinth in Art was already known in the walls of the later Palace we have now the proof in an interesting discovery made in what appears to be the remains of a corridor on the terrace immediately below the East Portico of the Hall of the Double Axes. The fallen plaster here showed the remains of an elaborate series of mazes painted in a reddish brown on a white ground (Fig. 62). The Labyrinth figures here, though belonging to the same class, are more complicated than those on the archaic coins of Knossos, the Minotaur upon which is also, as has been shown in the last Report, an heirloom from Minôan times. A simple key or maeander pattern appears on some of the sealings found by Mr. Hogarth at Zakro. A still earlier example of the same class occurred in a magazine of the Earlier Palace together with fine 'Middle Minôan' pottery on the

---

[1] The only other mark found on the pottery here was a **T** sometimes placed on its side.

East slope. The source of these maeander designs, and ultimately of 'the Labyrinth in Art,' will probably be found in a curious class of Egyptian button-seals, dating from about the VIth and VIIth Dynasties, on which similar designs predominate.

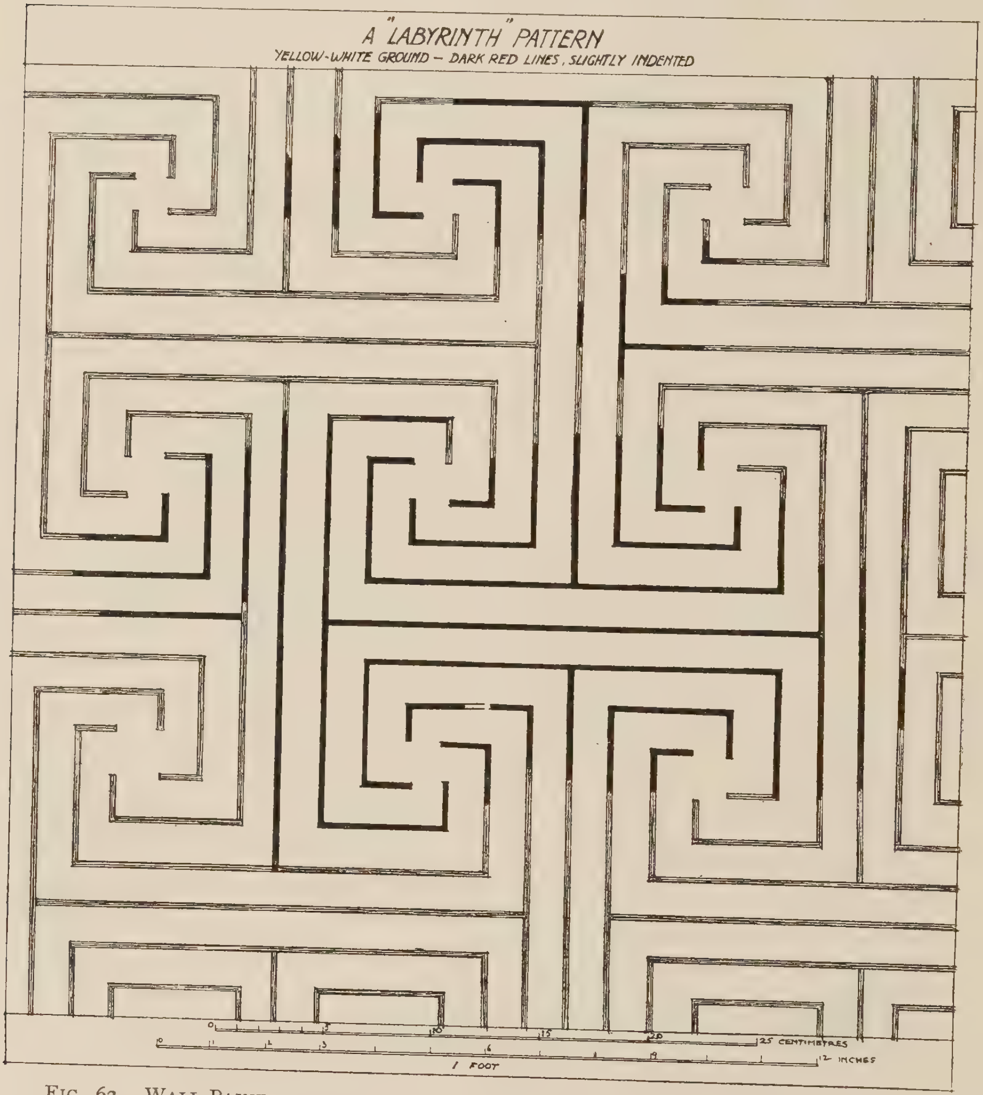


FIG. 62.—WALL-PAINTING CONSISTING OF LABYRINTH PATTERN FROM CORRIDOR E. OF HALL OF DOUBLE AXES.

Between the small Shrine and the Court of the Sanctuary were two square chambers of similar dimensions, one opening on the Court, which had been completely cleared of their contents. It is possible that there was originally—in accordance with the tripartite division visible in the Temple fresco and the Dove shrines of Mycenae—a group of three small cells devoted to a similar cult. From the presence of altars like those near the wall of the West Court and that by the Southern Propylaea as well as from other indications, it may be inferred that there were several similar shrines within the Palace area. Each quarter of the Palace may well have had its special sanctuary, and the Temple Fresco leads us to infer that some of these were more showy erections (though still of exiguous dimensions) than the humble cell of the South-Eastern region.

The contents, however, of the present Shrine derive a special interest from the decadent period to which the bulk of them belong, since they afford a convincing proof that essentially the same religious cult that we have seen illustrated by the terracotta Sanctuary from the Earlier Palace, survived to the very latest period of occupation. This religious survival can indeed be carried a step further in other parts of Crete. A close parallelism is visible between the cylindrical-based female images here brought to light and those from a shrine of still later date, found by Miss Harriet Boyd in the Mycenaean settlement at Gournià, in the Province of Mirabello. The female images there found were of plain clay and much larger and coarser. They had snakes coiled about them and small attachments in the shape of the Sacral Horns. In this case, too, a plaster tripod had been placed in front of the figures. Still later and very rude versions of the same religious type were found by Dr. Halbherr in the Sub-Mycenaean cemetery of Prinià, near Gortyna.

## § 23.—SOUTH-EAST COURT AND RUBBISH HEAP.

South of the Court of the Sanctuary, on a lower terrace level, is another oblong Court or Yard, here called the South-East Court. It is enclosed by walls on three sides, that to the West supporting an ascending staircase of which some steps remain. This open space seems to have been largely used as a receptacle of rubbish, and the amount of ordinary clay cups of the Later Palace style found here at the beginning of the excavations in 1900 led the workmen to name it the *Καφενεῖον*. The deposit of pottery included in its lower stratum many fragments of 'Kamáres' ware probably dating from the Earlier Palace. On the necks and handles of some of the plain pottery belonging to the early period of the Later Palace were found the marks already referred to in the shape of T's and Double Axes of earlier and later form. This pottery answers in fabric to the plainer vessels found in the Plaster Closets, and others from the North-East Magazines and elsewhere, and the close correspondence presented by some of the vases with those found at Phylakopi marked in a similar way is a significant sign of contemporaneity. A fragment, with traces of streaked colouring, in the style of the North-East Magazines, found in the same stratum of the South-East Court, is of interest as showing part of a graffito inscription, the characters of which though linearised seem rather to fit on to the Pictographic System.

## § 24.—REMAINS OF EARLIER BUILDING TO SOUTH-EAST.

Immediately East of the South-East Court were excavated a series of deep chambers and cell-like compartments of simple construction, evidently belonging to an earlier building, and, indeed, somewhat out of line with the Later Palace work immediately to the West of it. The floors of these chambers lay about 5 metres below the present surface and from about 3 metres down quantities of painted pottery of the Middle Minôan class were found. It was here that at a depth of 4 metres lay the dove vase found in 1900. With the pottery were also found a variety of clay sealings belonging to the period of the Earlier Palace, some with decorative designs derived from the XIIth Dynasty scarab style (Fig. 63). Other sealings are of great importance as exhibiting groups of pictographic characters of early type. It thus becomes evident that this form of script was in vogue in the Earlier Palace. Fig. 64 shows an example of one of these impressions

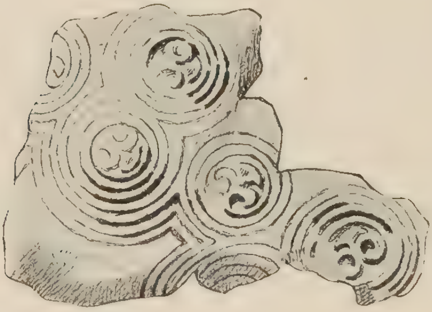


FIG. 63.—CLAY SEALING WITH SIGNET IMPRESSIONS SHOWING DESIGN DERIVED FROM XIITH DYNASTY SCARABS $\left(\frac{V}{\Lambda}\right)$.

with the bent leg, double axe and fish signs. Another sealing (Fig. 65) shows a double axe with a scale pattern.

These early chambers and cells were composed of rubble masonry, and square limestone doorposts took the place of the low bases supporting wood and plaster door jambs, seen in the Later Palace. Some of the compartments here are mere walled pits about 1·55 metres N.S. by 0·80 E.W., and are perhaps largely foundation structures.

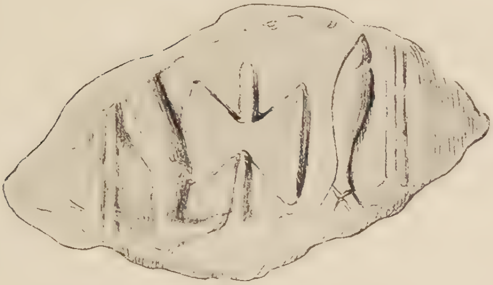


FIG. 64.—CLAY SEALING WITH PICTOGRAPHIC SIGNS ($\frac{3}{1}$).

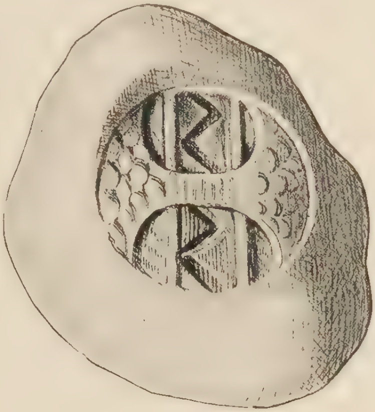


FIG. 65.—DOUBLE AXE WITH SCALE PATTERN ($\frac{3}{1}$).

## § 25.—CUPS WITH INK-WRITTEN INSCRIPTIONS.

The upper part of the early constructions on the South-East, mentioned in the preceding Section, had evidently been made use of as basements for a wing of the Later Palace. Here were found various vases belonging to its early period, including two cups of quite exceptional interest. These cups, the relatively early date of which is attested by their forms still showing traces of the characteristic contour of the earlier Minôan painted class, were themselves of plain clay. The interior, however, was in both cases occupied by inscriptions in linear characters written in what appears to be a kind of ink of deep brown or blackish colour. The writing shows a cursive tendency, and there are some variations from the ordinary linear forms. I have therefore set beside my copy of one of the two inscriptions given in Fig. 66 *a* a rendering of it in the characters of the normal linear script (Fig. 66 *b*). The existence of stops between some of the words or sentences will be noted.

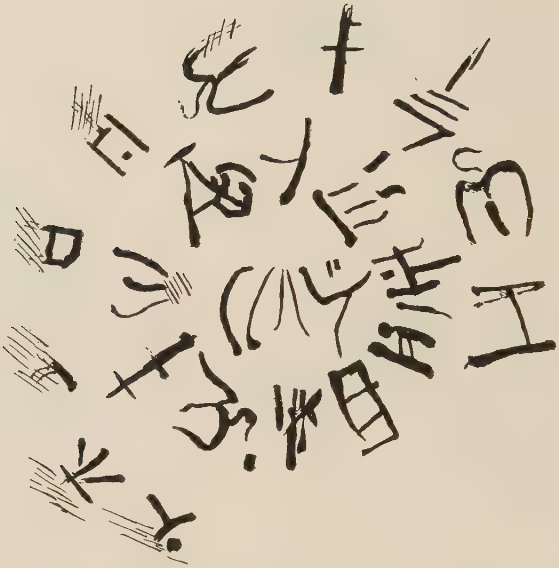


FIG. 66 *a*.—INK-WRITTEN LINEAR INSCRIPTION IN CUP.

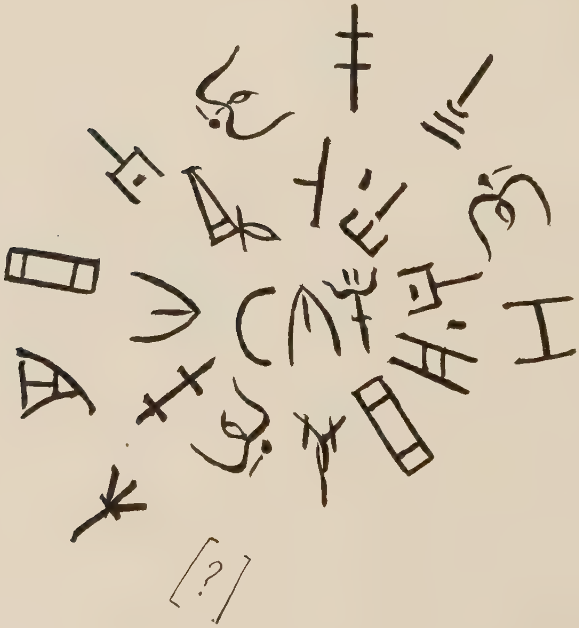


FIG. 66 *b*.—TRANSCRIPTION OF *a* IN NORMAL CHARACTERS OF THE LINEAR SCRIPT.

So far as appearance goes, the base of the ink used may have been sepia. It has been extraordinarily durable and so indelible that it was possible carefully to wash the inner surface of the cups. The lines of the letters show occasionally a tendency to divide, which may point to the use of a reed pen. As a whole the inscriptions present an extraordinary parallelism in their general character to those on Egyptian *ostraka*.

The great value of these ink-written inscriptions is that they give us the first direct evidence of the existence of literary materials in the Palace of Knossos other than the inscribed clay tablets. These specimens of penmanship are the work of practised scribes, who, writing in a different manner, had developed independent methods and forms, somewhat variant from that of the other school of scribes who wrote with a pointed instrument. The heaps of broken seals found in the Room of the Archives and elsewhere already suggested the inevitable inference that they had originally belonged to written documents the materials of which had perished. What these materials were it is impossible to say with certainty. Parchment may have been used, and the old Cretan tradition that palm leaves had once been used for writing should not be left out of account. In any case the proof that writing in ink was practised in the Minôan Palace opens out possibilities of the former existence of literary materials of a fuller kind than could be supplied by means of the clay tablets.

## § 26.—SOUTH-EASTERN ANGLE OF THE PALACE.

The exploration of the South-Eastern Palace region is still incomplete, and it must be sufficient here to give the briefest summary of the general results obtained.

South of the South-East Court is a group of chambers, one of which containing part of a *pithos*, is certainly a Magazine, while the South-Eastern angle is occupied by a square tower-like structure with abnormally thick walls. This group of chambers seems to form a connected whole, and is entered on the East side through an oblong room, larger than the rest, which forms a kind of entrance hall. Some rather elegant vessels of the late Minôan class were found here.

At the extreme South-Eastern angle a double staircase, one flight of which is preserved, runs down towards what may have been a postern gate on this side. On either side of the lower entrance passage of this staircase are two rooms built of good limestone masonry, that to the South of oblong shape, being lined with gypsum plaques like the North Bath. The other is a square room with a square stone pillar standing on a low base in its centre. In the entrance passage between the two rooms were brought to light important bits of wall painting consisting of olive or myrtle sprays and the group of lilies already referred to. A small fragment showing grass in seed is also of singularly naturalistic execution. In the same area also occurred bits of painted pottery in the fine Later Palace style, and an ivory knot similar to the porcelain example from the Fourth Shaft Grave at Mycenae. Here, too, was found a small columnar shaft of porphyry-like material, round which runs a spiral band relieved with a continuous decorative design of a kind also found on the Palace vases.

It is to be noted that the group of structures about the South-Eastern staircase is set at a somewhat different angle from that of the rest of the Eastern Palace wing. This abnormal orientation is almost certainly accounted for, however, from the fact that this angle of the building lies on the edge of a steep bluff, and that it was therefore found convenient to follow the contour of the ground. It must be regarded as an integral part of the Palace.

## § 27.—EASTERN WALL-LINES AND BASTION WITH DESCENDING RUNNEL.

On the lower terrace a little East of the East Portico of the Hall of the Double Axes came to light the foundations of two parallel walls perhaps belonging to a Corridor. It was here that the 'Labyrinth fresco' was discovered, and a little North of the same spot lay large fragments of a plaster dado showing a pale yellow ground realistically decorated with veins in various shades of reddish brown in imitation of marble.[1]

Parallel with the remains of the Corridor, and about a metre and a half East of it, a double line of wall, the foundation courses of which alone were preserved, runs from North to South. These were evidently terrace walls, and seem to represent the limits of the Palace in this direction.

It is true that about 12 metres below the point where the traces of this double wall temporarily cease in a Northerly direction, parts of a walled angle are visible which seem to represent some projecting spur of the

---

[1] See Fyfe, *R.I.B.A. Journ.*, 1902, p. 112, Fig. 13.

Palace, or a covered line of approach to its no longer visible Eastern Entrance. But the true continuation of this double wall-line is to be found in two terrace walls with a similar narrow space between them that form the Southern and Western sides of a curious Eastern Bastion, to be described below, and prolong their course thence towards a point probably representing the north-east angle of the Palace.

The Southern part of this Bastion seems to have contained a double staircase, the steps of the upper flight of which have disappeared. This upper flight led to the terrace above and thence in the direction of the Court of the Oil Spout. On the lower part of this staircase there was apparently a double landing with two or three intermediate steps connecting the two flights, as in the case of the Quadruple Staircase. Of these landings the lower only has been preserved, and from it a small flight of five steps leads down to a stone terrace having itself two slight steps at either end. From this terrace again, about 5 metres on, another flight, of which only two steps and part of a third are preserved, descends in an Easterly direction (See Plan, Fig. 67 and Fig. 69).

But the most interesting feature of the whole is the water channel that accompanies the stairs. The steps themselves are a metre wide, but between them and the outer balustrade of the staircase is a space of 25 centimetres occupied by a stone runnel, the construction and arrangement of which shows extraordinary skill in dealing with running water. Its stone channel instead of accompanying the descending flight of stairs in one continuous slope, as might have been supposed, follows the successive gradations in a series of curves. (See Section BB, Fig. 68.)

The effect of these descending curves is to put a repeated check on the rush of water. The curves themselves almost exactly agree with the natural parabola which water on falling would execute. There is thus a series of leaps instead of one, and the water flowing over a succession of curves is subject to friction which reduces its velocity. The current thus reaches the critical point, the sharp turn namely at the bottom of the stairs, with an impetus much inferior to that which it would otherwise have accumulated from the unbroken descent. The force of the water being in this way diminished, it was less liable to overflow the pavement at the bottom of the flight of stairs. The hydraulic science displayed by this device is such as to astonish the most competent judges.

But this is not all. At the bottom of the flight of stairs where the

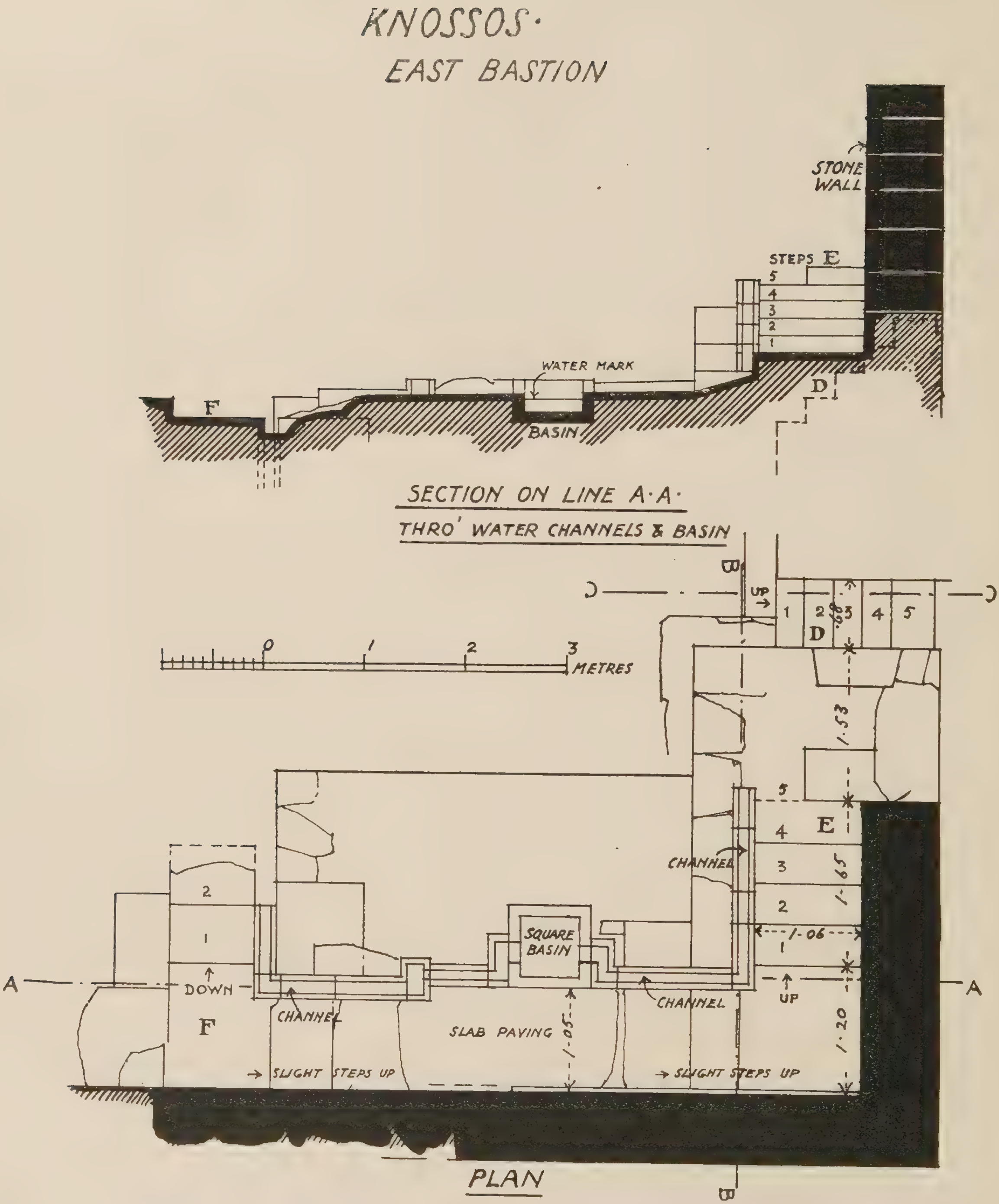


Fig. 67.—Plan of East Bastion with Section on Line A—A.

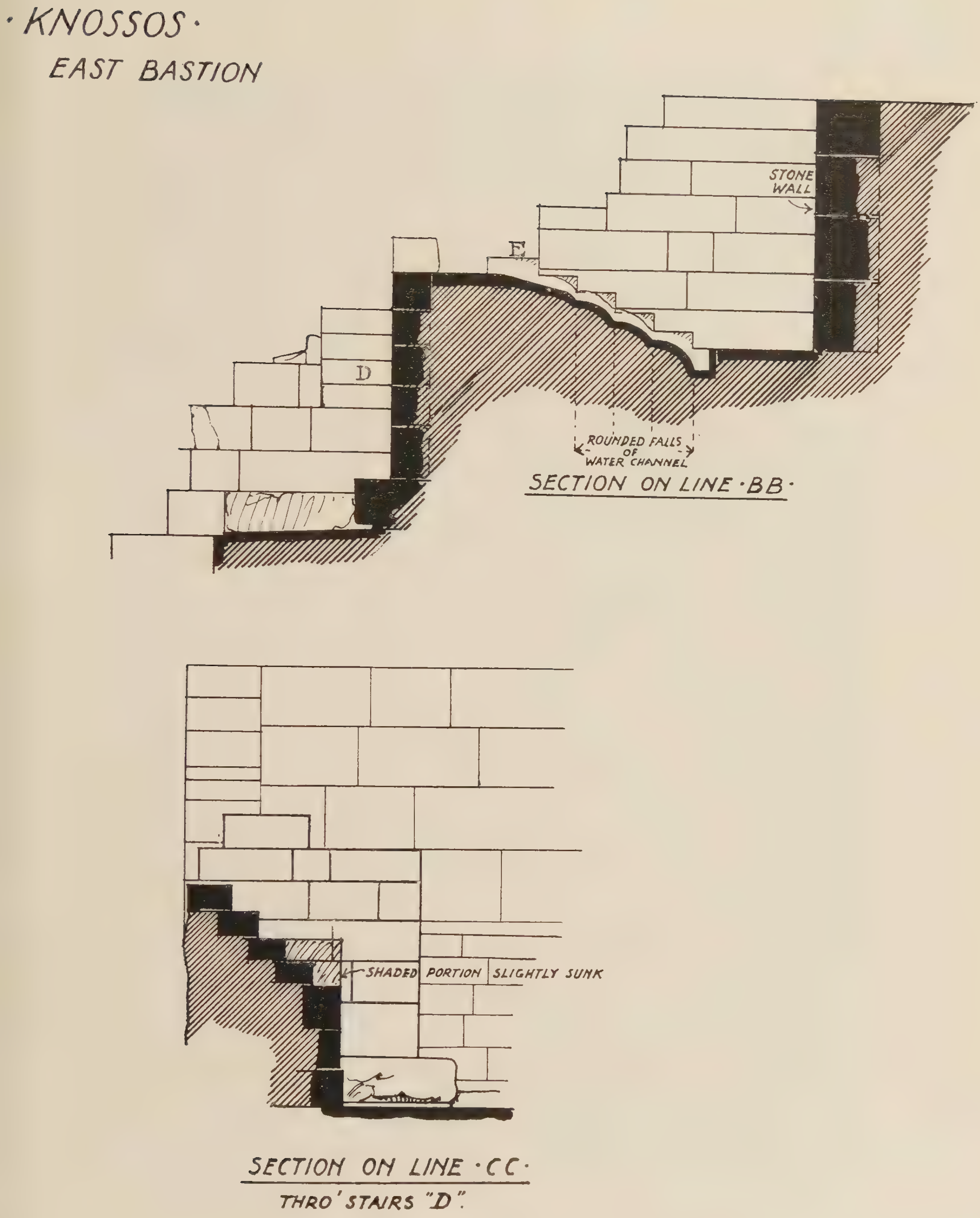


Fig. 68.—Sections of East Bastion on Lines B—B and C—C.

runnel takes a sudden turn to the right the channel is deepened so as better to accommodate the inrush of the current, and the water is further drawn away from the possible point of overflow by a sudden downward slope of the channel.

It appears that the water was ultimately wanted for some tank below which it was desirable to keep clear. Accordingly the level part of the course along the small terrace was taken advantage of to form a small catch-pit, for the deposit of sediment, in the shape of a shallow square basin, which could easily be cleaned out when necessary. In order to secure a certain local retardation of the current, moreover, favourable to the precipitation of sediment, the runnel instead of proceeding directly to the basin makes a double bend, repeated in its continued course beyond. In the angles of these bends as well as in the small catch-pit itself the sediment according to well-known laws would have a tendency to be deposited. The extraordinary point is that these laws should have been known to the Minôan architect.

The runnel now proceeds by two more elongated curves, answering to the low steps at the further end of the terrace, to the point where it turns Eastward by a continued curving course down the further flight of steps, of which only the uppermost are preserved.

In the North face of the wall, immediately beyond the Bastion down which the runnel descends, are visible five steps of a smaller staircase (D in the Plan and Section and Fig. 69), which display the peculiarity that they suddenly break off, leaving a drop of 1·20 metre to the paved floor level below. The possibility suggests itself that the level of the lowest step may represent the water level in some kind of tank, supplied, in part at least, by means of the runnel that accompanies the other stairs. Two courses of a wall are in fact visible about a metre East of the smaller flight of steps, which seems to have represented the containing wall of the basin on that side. There are also traces of its North Wall.

The platform of masonry with the larger stairs and runnel is not jointed into the main terrace wall behind, and, though doubtless contemporary with it, forms, so far as its construction goes, a kind of annexe to it. It is built of smaller blocks than the others, several of which show incised signs belonging probably to the latest Palace Period.

The terrace wall itself is backed, as already noted, at an interval of only a few centimetres by another rougher wall, and this double line,

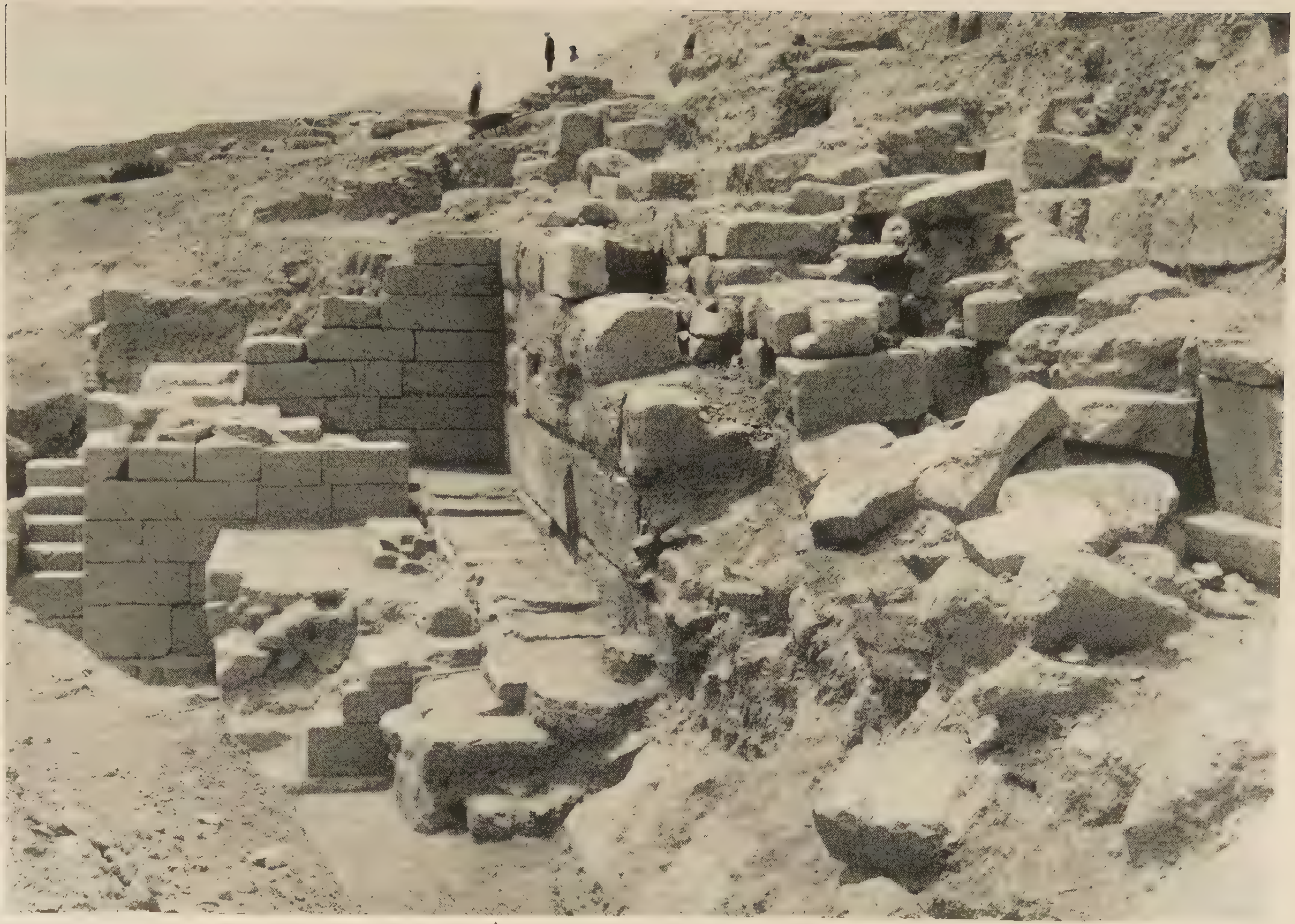

Landing of Staircase E.
Continuation South of Eastern Wall Lines.
Wall (IV.) within Wall III.
Original Outer Wall to East with Plinth (III.)
Remains of Terrace Wall (II.) Backing Later Outer Wall (I.)
Small Staircase D.
Lowermost Steps.
Water Runnel and Catch-Pit.
Outer Wall to East (I.)

FIG. 69.—VIEW OF EAST BASTION AND REMAINS QUADRUPLE LINES OF WALLING BEHIND IT.

though partly in a ruinous state, can be traced for about another twenty-five metres beyond the East Bastion. The outer of these two walls alone has a face, on the Eastern side, the inner wall being constructed entirely of roughly finished blocks. This dual arrangement which characterises what may be regarded as the Eastern boundary line of the Palace, also reappears in the case of the Western Wall of the deep-lying central region of the East side of the Palace, that, namely, which borders the Quadruple Staircase, the Court of the Distaffs and adjoining rooms. The object, especially visible in the latter case, is to protect the second of the two walls from damp by interposing an air-space between it and the true terrace wall. At the same time certain points of contact between the inner and outer walls of the system gave the whole a measure of unity as a supporting wall. The Minôan architect showed in other ways a special genius in protecting the main halls of the low-lying part of the building against damp. It will be seen by referring to the Plan on p. 56, that the whole 'Domestic Quarter' of the Palace and the adjoining halls are not only protected by the double wall and air-space to the West, but are flanked to North and South, where there was also an earth cutting, by corridors, light areas, and blocks of masonry containing drain or ventilating shafts.

Almost immediately behind the second line of the East Wall is another wall, traceable, in part only by its foundations, for a distance of about 30 metres beyond the East Bastion. This wall is constructed of large limestone blocks and has a good facing on its Eastern side, showing that it was originally intended to be visible. It follows that the rough wall in front of it and the outer wall-line in connexion with it are of later construction. The third wall-line would then represent the original terrace wall, which was afterwards supplemented, owing probably to its having fallen into a ruinous state, by the two outer lines with foundations, at a somewhat lower level. There are also remains of a fourth inner line of wall at a mean distance of about a metre within the earlier terrace line represented by the third wall (see Fig. 69).

This quadruple line of wall may be taken to represent the Palace boundary on this side and is evidently the continuation of the similar system visible West of the East Bastion. Further Eastwards, owing to the denudation of the slope, the traces of these walls dwindle to vanishing point, but there are strong indications that these remains very nearly reach the extreme North-West corner of the building. A distinct Northern boundary line is in fact visible, which would have met the Eastern Wall at a point about 35 metres from the East Bastion. The first section of this line on the slope above is supplied by the remains of an existing wall by the North-East Postern. East of this—following the Northern boundary of an earlier group of buildings to be referred to in the next Section—is a cutting as if for a roadway, which was found choked with tumbled blocks, apparently derived from a line of outer walling that had originally surmounted it.

It is true that immediately North of this cutting are remains of a block of buildings consisting partly of magazines with *pithoi* of the advanced Mycenaean class, together with other constructions belonging largely to the period of the Earlier Palace. These structures, however, seem to be at most of the nature of dependencies to the main building.

## § 28.—STORE-ROOMS OF EARLIER PALACE, WITH PAINTED VASES OF EGG-SHELL FABRIC.

In the angle included between the Magazines of the Knobbed *Pithoi*, the Eastern Wall-lines and the cutting to the North mentioned in the last Section, the remains of the Later Palace have almost entirely disappeared. This is no doubt largely due to the natural denudation of the slope of the hill, but the remains of a kiln found here belonging to the Roman period may indicate that some of the good material on this side was artificially destroyed.

To compensate, however, for the disappearance of the later Minôan structures within this area, a whole series of chambers belonging to the earlier building were here brought to light, in part beneath the level of the Roman kiln. The walls were of the same simple rubble construction as those of the primitive chambers near the South-East corner of the Palace. The rooms were small, with narrow door openings, and there appeared to have been a gallery on their Western border. Two points in regard to these structures were specially noteworthy. Although obviously of an earlier date and built according to a more primitive method than the Later Palace, the orientation of their main lines, both from North to South and from East to West agreed with the later plan. It was also evident that some of the chambers had, at a time when their original floor levels had slightly risen, been used as basement stores by the occupants of the Later Palace.

In one case piles of vessels similar to those of the North-East Magazines had been placed on a floor level only a few centimetres above layers of finer vases belonging to the earlier Minôan Period.

As a rule, however, the difference of level was very decided, and the following was the usual stratification brought to light.

1. At or near the surface level a disturbed clayey deposit with pottery answering to classes found in the Later Palace, including the Period of Re-occupation. This goes down 1·25 metres.
2. A stratum 12 centimetres deep full of wood ashes packed with Late Minôan (Kamáres) sherds similar to those below the Room of the Spiral Fresco (see p. 26, 27).
3. A pale clayey stratum ·20 deep with a few sherds of the same general character as the last.
4. A deposit 45 centimetres thick of wood ashes with the remains of Minôan painted vases of the finest fabric. This deposit rests on a stamped clay floor-level about 1·88 from the present surface.

It was evident that the bulk of these chambers had been store-rooms for pottery of a very remarkable quality. Although from the extreme delicacy of the fabric of a large proportion of the vessels the mere weight of the superincumbent deposit seems to have been enough to crush them, it has been possible to put together a series of vessels in a fairly complete form with results that throw an entirely new light on the high perfection of ceramic art already reached in what may be best described as the Middle Minôan Period.

The vases from these chambers consisted for the most part of bowls and cups, with or without handles, of great variety and elegance of form. Their very fine fabric, often as thin as egg-shell china, as well as some of their contours, suggest originals in metal work, and some of them are adorned with embossed decoration evidently copied from the *repoussé* designs of cups in precious metals. The slight metallic lustre occasionally visible on the black ground of these vases helps to enhance this comparison.

The colours are generally vermilion red, orange, and white, on a black ground. Sometimes, however, the ground is a bright brick-red, as in the case of some beautiful bowls adorned with white asterisks. More rarely the ground is pale buff with dark brown decoration—a style which anticipates the prevailing fashion of the Later Palace Period. A cup with white leaf ornaments on a dark ground round its walls and the same decoration in dark brown on a white ground on its base illustrates the transition between the two usages.

It is impossible here more than to refer to these exquisite ceramic types, which will be more fully illustrated in Dr. Duncan Mackenzie's account of the Knossian pottery in the forthcoming number of *The Journal of Hellenic Studies.* A good example of a cup with a fine metallic outline is given in Fig. 70. It shows a simple geometrical decoration—white with small red disks on the black ground—resembling a succession of narrow plates with studs or rivets ; the handle, part of which only is preserved, is about two centimetres broad, but so slender that it must have been used with great precaution. The cup reproduced in Fig. 71[1] is one of the most beautiful ceramic productions of the Minôan or any other age. It is light in make and spontaneous as a bubble, and the design it bears, the calix of a water-lily as it floats on the surface of a pool, is in keeping with the lightsomeness of form. The idea of this decoration may have been suggested by a lotus vase of Egypt, but the floral motive is here more delicately treated.[2] The outer leaves of the calix are black with a central vein of red, the inner petals white, and the whole upper margin of the corolla is outlined against a red background.

It is to be observed that the divergent spiral and several other designs on the cups and bowls from these early store-rooms, like the contemporary Cretan seals, show distinct traces of the influence of Egyptian motives of the Twelfth and Thirteenth Dynasty Period. The character of the decoration is geometrical, and plant forms where they occur are treated in a more or less geometrical manner. There is nothing here of the untrammelled naturalistic style which characterises the art of the Later Palace.

## § 29.—FRAGMENTS OF BOWLS OF DIORITE AND LIPARITE OF EARLY DYNASTIC EGYPTIAN FABRIC.

The high level of civilisation attained at Knossos by the date of the Middle Kingdom of Egypt is well illustrated by the beautiful ceramic

---

[1] Both of these illustrations are from black and white drawings by Mr. Theodore Fyfe.

[2] The same design in a coarser form is applied to a characteristic series of Cretan stone bowls of the type figured in Cretan Pictographs, &c. (Quaritch, 1895) *Deposit of H. Onuphrios*, p. 123, Fig. 123. A variety with a double calix was found in the North doorway of the Hall of the Double Axes (see above, p. 39).

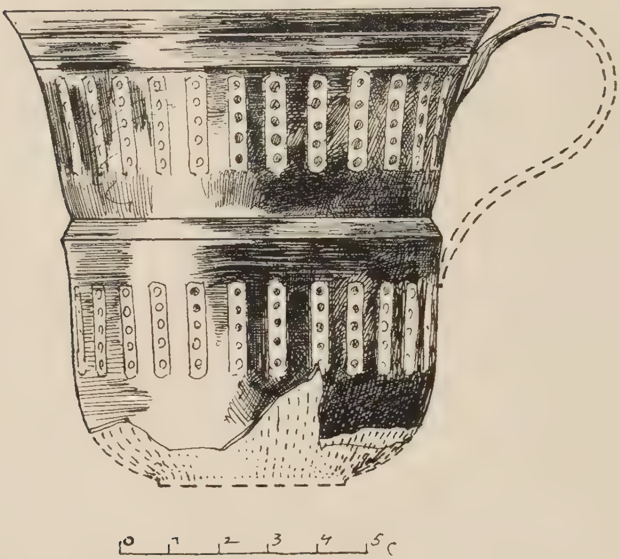


FIG. 70.—PAINTED CUP OF METALLIC OUTLINE: MIDDLE MINÔAN.

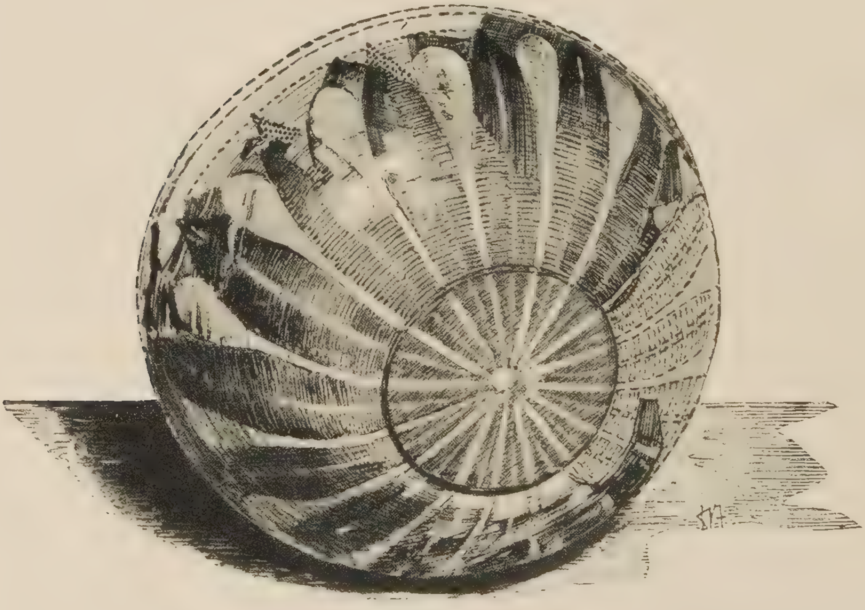


FIG. 71.—CUP WITH WATER-LILY DESIGN: MIDDLE MINÔAN.

products described in the preceding Section. But the exquisite technique of these painted vases itself implies a very extensive period of earlier development. On the Palace site, moreover, and notably in the deep-lying early chambers on the South-East (see above, p. 106), were found remains of vases typologically at least anterior to the developed 'Middle Minôan' class. The decoration on these, consisting of chevrons and dots in reddish-yellow and white on a black ground, simply represents the taking over of the incised and punctured decoration of the advanced Neolithic style, where the white and orange inlays in the burnished black 'bucchero' already anticipate the system of colouring.

Already in 1895 certain forms of Cretan stone vases had led me to seek comparisons in Old Kingdom forms, notably those of the Fourth Dynasty.[1] The most characteristic of the Cretan bead-seals—the prism-shaped—find their prototype moreover in a black steatite example found at Karnak, the subjects on which are allied to those of a peculiar class of cylinders of the same material belonging to the earliest Dynastic period.[2] Several of the traditional figures of Cretan intaglios, moreover, such as the Minotaur itself, go back to the same cycle. The influence of another class of seal, of button shape, frequent about the VIth and VIIth dynasties, and on which the maeander design, the prototype of the 'Labyrinth in Art,' is specially frequent, has also to be taken into account.

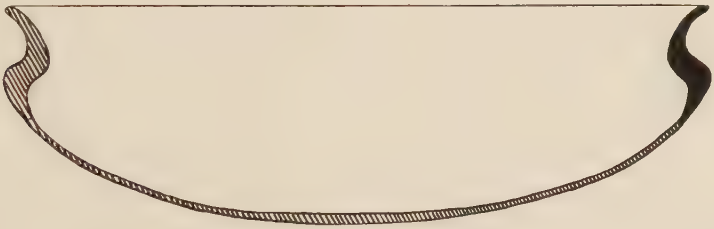


FIG. 72.—FRAGMENT, AND RESTORED SECTION, OF DIORITE BOWL, FROM EARLY PALACE.

The excavations of 1902 have now supplied in a fragmentary but conclusive form the evidence of actual imports from the Nile Valley belonging to the early Dynastic Period.

Among some debris from the South wall of the Store Room containing the 'false-spouted' jars of the earliest period of the later Palace (see above, p. 88) occurred a beautiful fragment of a shallow finely profiled bowl of translucent diorite (see Fig. 72). The circumstances of the find sufficiently indicate that the fragment belonged to an earlier date than the Later Palace, but the evidence goes far beyond this. Both form and material show that the vase to which the fragment belonged was of the finest Egyptian fabric, and in the opinion of the most competent Egyptologists[1] the probable date of its manufacture goes back to the period of the IVth Dynasty (c. 4000–3700 B.C.), while it cannot be later than the VIth (c. 3500–3330 B.C.). As a matter of fact the fragment so closely resembles the material and contour of a diorite bowl in the Ashmolean Museum (see Fig. 73) from the tomb of the first Fourth Dynasty King Sneferu (*c.* 3998–3960 B.C.) that it might almost have been broken from it. The diorite is of the most exquisite kind, such as is found in the royal tombs.

---

[1] *Sepulchral Deposit of Hagios Onuphrios* in *Cretan Pictographs, &c.* (Quaritch, 1895), pp. 117, 118).

[2] *Further Discoveries of Cretan, &c. Script* (*J.H.S.*, xvii. 1898, p. 362, *seqq.*).

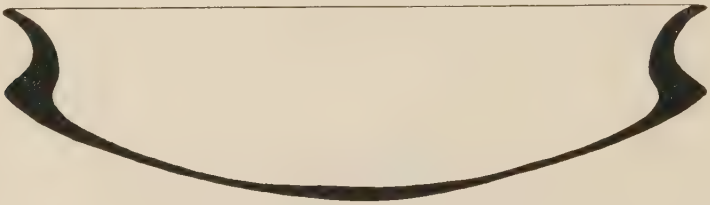


FIG. 73.—SECTION OF EGYPTIAN DIORITE BOWL FROM TOMB OF KING SNEFERU, OF THE FOURTH DYNASTY.

Nor does this evidence stand alone. On the East slope, near the early Store Rooms containing the 'Middle Minôan' pottery, but in disturbed earth, was found another fragment of a bowl of the same type, though of somewhat more carinated profile (see Fig. 74), cut out of a peculiar speckled variety of volcanic glass. The material, which is semi-transparent, has been examined by the eminent mineralogist, Professor H. A. Miers, and proves to be the very distinct variety known as liparite and derived from the Aeolian Islands.[2] This form of obsidian is unknown in the Aegean, and it appears to be unlikely that it could at any period have

[1] Professor Petrie considers it to be of the Fourth Dynasty and in no circumstances later than the Sixth. Professor Waldemar Schmidt, of Copenhagen, considers that these bowls were made during the Fourth Dynasty, and that though they may have been in use during the Fifth Dynasty it is impossible to bring them down to a later date.

[2] This conclusion is confirmed on the geological side by Professor W. J. Sollas.

been found there.[1] A few other fragments of the same material have occurred in the Palace strata at Knossos, including part of a lentoid intaglio dating from its latest period. From the earliest Neolithic times onwards, however, the obsidian in general use was the fine black quality such as is found in such profusion in Melos. It is, moreover, a remarkable fact that though the form and finish of the bowl to which this fragment belonged, proclaim it to have been of early Dynastic Egyptian fabric, the obsidian vases, hitherto found in Egypt itself, are of a material answering to the ordinary Aegean class. It is possible that the Italian variety offered greater facilities for cutting out vessels of comparatively large dimensions. The obsidian vases found in tombs belonging to the first Dynasties at Abydos are of more compact type, and to cut out a delicate bowl from the Aegean material might well have baffled human skill. As it is the bowl from which the fragment has been derived with its finely profiled outline and exquisitely slender fabric must have been a prodigious *tour de force.*

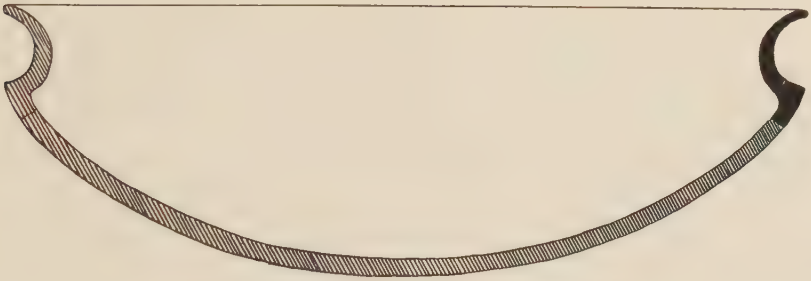


FIG. 74.—FRAGMENT AND RESTORED SECTION OF LIPARITE BOWL.

In Professor Petrie's opinion the sharply characterised form shows that this liparite bowl cannot be later than the IVth Dynasty. Coupled with the finding of the fragment of the diorite bowl, it is not too much to say that the discovery throws an entirely new light on the external relations of Minôan Crete in the early centuries of the Fourth Millennium B.C. It would appear that maritime intercourse was already opened up with Italy as well as the Nile Valley, and it is difficult to avoid the conclusion that Cretan mercantile intercourse already supplied Egypt, not only with the Aegean type of obsidian, but with the rarer quality derived (perhaps by means of the later Ionian coasting route) from the Aeolian Islands. The Minôan ruler seems to have received in exchange some finished products in the shape of vessels both of the finest Egyptian material and of the liparite that his own maritime enterprise had secured for Pharaoh. The alternative hypothesis that either class of bowl was made in Knossos by Egyptian lapidaries seems less consistent with general probabilities.

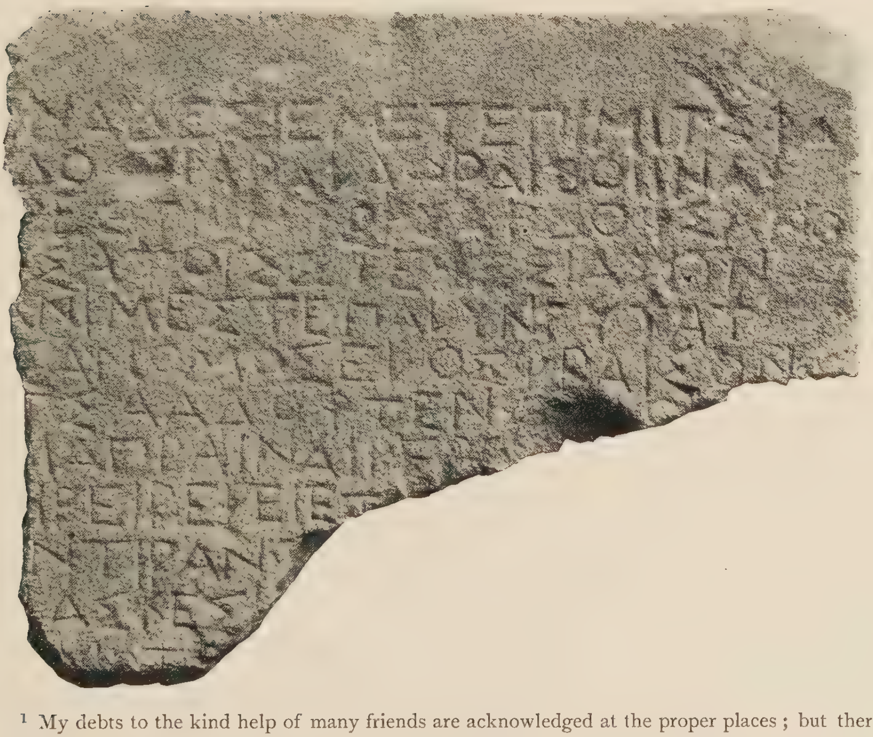
---

[1] This is Professor Miers' opinion.

ARTHUR J. EVANS.

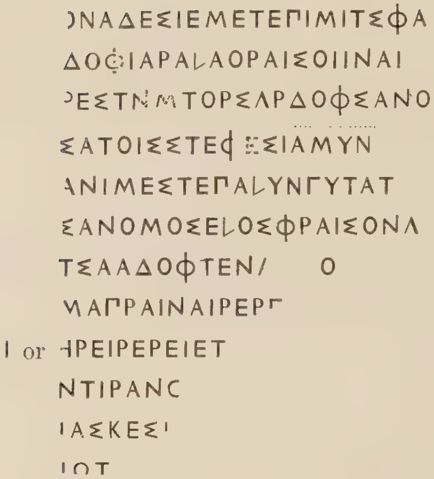
# THE PRE-HELLENIC INSCRIPTIONS OF PRAESOS.[1]

## I.—*The Text of the* nomos-*fragment.*



---

[1] My debts to the kind help of many friends are acknowledged at the proper places; but there are three whom I desire to thank for more than can be shown by particular references. The scope of the article on the linguistic side has been twice enlarged in consequence of fruitful suggestions from Mr. Bosanquet; I could not have ventured to admit even brief allusions to Semitic forms



)ΝΑΔΕΣΙΕΜΕΤΕΠΙΜΙΤΣΦΑ
ΔΟϘΙΑΡΑΛΑΟΡΑΙΣΟΙΙΝΑΙ
ↄΕΣΤΝΜΤΟΡΣΛΡΔΟΦΣΑΝΟ
ΣΑΤΟΙΣΣΤΕϘ ΞΣΙΑΜΥΝ
ΛΝΙΜΕΣΤΕΠΑΛΥΝΓΥΤΑΤ
ΣΑΝΟΜΟΣΕΛΟΣΦΡΑΙΣΟΝΛ
ΤΣΑΑΔΟΦΤΕΝ/ Ο
ΜΑΠΡΑΙΝΑΙΡΕΡΓ
I or ⊣ΡΕΙΡΕΡΕΙΕΤ
ΝΤΙΡΑΝϹ
ΙΑΣΚΕΣΙ
ΙΟΤ

This stone was found by Mr. R. C. Bosanquet, in June 1901, on the Altar Hill ("Third Acropolis") at Praesos, in the ruins of the wall enclosing the *τέμενος*, within the northern entrance. The site and surroundings are fully described by him in *J.H.S.* xxi. (1901), p. 340.

The photograph and transcription are Mr. Bosanquet's. The latter was made by him directly from the original, after considering the points raised by a less complete transcription which I had attempted from the photograph and from a careful paper impression which he had kindly sent me. It will be seen from the notes which follow that nearly all my questions have been wholly or completely answered, but it seems well to give this brief indication of the varying degrees of certainty of different parts of the text. Happily the bulk of it is now beyond doubt Mr. Bosanquet's comments are indicated by his initials.

Dotted lines indicate strokes which are not so clear as the rest.

At the end of l. 4 the horizontal line above the letters seems accidental from its covering more letters than one [certainly accidental R.C.B.]

§ 1. There follow two transliterations, in the first of which I have put down only those letters which seem to me now absolutely certain (from the photograph, the impression, and Mr. Bosanquet's notes); the letters underlined are slightly injured but still clear. In the second I have indicated all the readings which seem to me to be reasonably probable from the indications of the impression, corrected by Mr. Bosanquet's reading of the stone wherever he felt it was certain. Where his repeated examination left him still in some doubt, it seems wisest to leave the text suggested by

---

without the valuable and repeated help of my colleague, the Rev. D. Tyssil Evans; and the suggestive and vigilant criticism of Professor R. M. Burrows upon two stages of the proof of the paper, especially, but by no means only, upon its historical side, has removed some definite errors, and encouraged me to seek a broader basis than had contented me at first for more than one of its conclusions. I should add that Dr. R. Von Planta of Zürich was kind enough to read the proof and supply one or two references; and I have to thank also Mr. H. S. Cowman, of the Cambridge Archaeological Museum, for occasional assistance of the latter kind.

the impression, as giving at least possible alternatives. In the second transcription only those letters are underlined which appear to me open to some degree of doubt.

(i) onadesiemetepimitsφa
do . . . . alaφraisoi . na .
. est . . . o . . . . doφsano
satois . te . . sia . . un
animestepalungutat
sanomoselosφraison .
tsaadoφten . . . . o
mapraina . . e . .
. . eirereiet
ntiran .
askes .
. . . t .

The dots indicate one letter's space; but it will be seen that some, like M, take more space than the average.

(ii) onadesiemetepimitsφa
? ia?φ
doφmralaφraisoiinai
?
rest . . . torsardoφsano
satois steφesiamun
animestepalungutat
sanomoselosφraisona
tsaadoφten . . . . o
maprainairere
ireirereiet
ntiran .
askes .
. . ot .

§ 2. The photograph shows (by the upper margin of the stone) that our fragment begins with the first line of the insc.; but it is to be observed that the different distances from the right hand margin at which the first six lines end show:

(1) that the engraver did not divide his words between two lines, and hence,

(2) that the last letters in these lines are also the endings of words, and hence probably

(3) that at least some letters are lost on the left of every line; *-tsa* and *-ntiran* do not appear to be the beginnings of words.

[It is very improbable that the strip broken off on the left is a narrow one. The stone seems to have no natural cleavage in this direction. —R.C.B.]

## NOTES ON THE ALPHABET.

§ 3. The letters are nearly all rectangular, save that (*a*) the lower bar of E often inclines a little downwards (as *e.g.* in the inscc. of Central Italy about 250 B.C., see for instance *It. Dial.* p. 108), and (*b*) that the bar of A more often inclines upwards towards the right; and (*c*) *l* has the form L.

§ 4. In the signs that are perfectly visible there are none, save this L, that are strange to the Ionic alphabet of the best period. From the data given by Roberts, *Gr. Epig.* pp. 39–52 (esp. 52 *ad fin.*) it would seem that this insc. cannot be earlier than 400 B.C. and may well be considerably later; it is therefore probably contemporary with the latest of the pottery described by Mr. Bosanquet, *J.H.S. l.c.* as 'ranging from the sixth to the fourth century.'

§ 5. The insc. is so worn that it is difficult to be sure of any interpuncts. In the following places, however, to judge from the impression, to me they seem

(*a*) probable:

l. 5 EΣT·
l. 6 ΣA·NOMOΣ·ELOΣ·
l. 7 TΣA·

(*b*) faint but possible:

l. 1 ƆN· l. 2 A·LA· l. 3 PEΣT·
l. 4 ΣA· l. 5 λNIM· l. 6 N·OM·
l. 8 M·A

[They are all accidental marks, I am certain.—R.C.B.]

§ 6. The letters which are quite certain are

| A A, | Γ, | ▷ Δ, | Ɛ E E, | I, | K, | L, | M, | N, | O, | Π Π, | Σ Σ, | T T, | Y, | Φ. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| a | g | d | e | i | k | l | m | n | o | p | s | t | u | *φ*[1] |

§ 7. The letter *r* occurs several times but I could nowhere be certain from the impression whether the form was P or Ꝑ; diagonal strokes seem to have tended to break the stone more than either vertical or horizontal, so that, for instance, I found some of the examples of ≤ very hard to read at first, though after repeated examination of the back of the impression I have now no doubt of them (*e.g.* the *s* in *sφa* in l. 1 and that in *φraiso* in l. 2). It was therefore hard to say whether the break which appears below the bow of P in all the places where the letter is certain did or did not conceal a small tail. [I take it as always P.—R.C.B.].

The loop of this sign in l. 9 (2nd letter) is so much smaller than is usual in P as to suggest that it rather be read as *b*; the latter appears in Crete and Thera also in the form ᑭ (Roberts, *Gr. Epig.* p. 39, **9***a*, p. 26, **4***m* = Roehl, *I.G.A.* 466. In Thera it seems also to have the form ꟼ (*I.G.Ins.* iii, no. 769, cf. *Hermes*, xxii, p. 136). A similar doubt might be felt about the third and fifth following signs. [On the stone they all appear to be simply P.—R.C.B.]

§ 8. The seventh sign in l. 7 might be a Ϙ since the vertical is not clear within the loop and does not seem to extend above it. But since in l. 2 the mason has omitted the vertical altogether in the *φ* of *φraiso-*, (the reading of which is certain from the recurrence of the word in l. 6) it is difficult to be confident that he meant anything but *φ* in l. 7. [I think it is a *φ*.—R.C.B.] Still more doubtful to me were the tenth sign in l. 8. [*irere* is certain in l. 8 and l. 9.—R C.B.] the third and fourth from the end of l. 4, the fifth and sixth of l. 3; and even the seventh of l. 9 might be a *φ* or Ϙ. [It is a P clearly on the stone. R.C.B.].

§ 9. The first sign of l. 9 might be the second half of H slightly rounded, as in Chios (Roberts, p. 386 and no. **150**: Roehl, *I.G.A.* 382); [it is I preceded by an accidental stroke.—R.C.B.].

§ 10. Apart from the gaps in ll. 2 and 3 which seem almost hopeless without the guidance of some parallel insc.—if such should ever be found —we have now dealt with all the signs which appear in Mr. Bosanquet's transcription except the ninth from the end of l. 3 which he gives as Λ and the tenth from the beginning (the first in the break) of l. 4 which he gives as q.

---

[1] In l. 2 the vertical stroke in this letter seems to have been forgotten by the engraver.

As regards the Λ, between *s-* and *-rd-* some vowel seems most probable, if not absolutely necessary (since if it were a consonant we should have to give a syllabic value to P which nothing else in this insc.[1] suggests). It cannot be γ, since we have Γ just below, nor π, since that appears as Π in ll. 1 and 5, nor λ, since that is Ⱡ in ll. 2, 5, 6; nor an ordinary *v* since that appears as Y in ll. 4 and 5. It might, of course, conceivably denote a special kind of *u* (we have Λ and Λ together in some 'Sabellic' inscc. beside A and ◇ (see *It. Dial.* 36,* p. 528). But I think it is simply a broken A, and that is how I read it, with very little doubt, from the impression.

§ 11. As regards the sign in the break of line 4, I hesitated between Φ and K; but what looked like the ends of the two bars of κ, may be merely the beginnings of the top and bottom bars of the following E (whose vertical has been broken away). If q were the real form, as Mr. Bosanquet read, some sibilant value would be suggested by the d of the Umbrian alphabet (*It. Dial.* pp. 401, 461) which was used also in Picenum in the form q to denote the local pronunciation of *c* before *i* (*ibid.* p. 449) in *Petruśdi*, *Paśdi* (**Petrucidius*, *Pacidius*). But since there is no other evidence of such a sound in these two inscc., nor in the place-names of the district (see below §§ 24–25), and since there is room for a Φ, I think it is more prudent to read it so.

It is of course tempting to read the two words as identical with Gr. τοις στεφεσ(σ)ι, but that would plunge us into a thicket of phonetic and morphological assumptions about the language from which we must keep clear at this stage, *i.e.* till we have exhausted the graphical evidence.

§ 12. Of the full Ionic alphabet there remain only Ι, H, Θ, X, Ψ, Ω which we have not as yet encountered at Praesos. Ι and Ξ (the latter appears on the other insc., *v. inf.*) might possibly compete for the 7th sign of l. 4, but with Mr. Bosanquet I believe this to be Σ. Of Θ and Ω (and probably H) as the inscc. stand there is no trace. X, in the form ⋈ (frequent in the Venetic, the Etruscan, and the so-called 'Sabellic' inscc.

---

[1] But in the *barxe*-fragment it seems that *-r* is syllabic in one word; *see* § 21 below.

(*It. Dial.* p. 528) where it denotes some kind of sibilant), might be imagined into the place of M in l. 2, and into the last gap of l. 4 [hardly: R. C. B.] if any other evidence made us expect it. The last sign of l. 2 might be a broken Ψ but the occurrence of the combination of φΣ in l. 3 makes a ψ very unlikely.

§ 13. It is on the whole not merely tantalising but significant that there should be no place for any non-Ionic signs save L upon either of the two inscc. except where the stones are broken. This seems to give us a presumption that none such existed in the script of Praesos. Also as to the aspirates it must be noted that the sound of φ in *φraisos* seems to differ slightly from that of an ordinary Greek *φ*, or it would not have been represented by *π* in Greek (Strabo, p. 478 gives the name as Πρᾶσος) [and the name appears with Π on *e.g.* the 4th cent. Stalai-Praesos treaty[1]: R.C.B.]; nor would it have become a *p* in Modern Greek (*Praesos*) but a *φ*, as in *e.g.* Phaestos and other modern Cretan names. Observe too that before *σ* (l. 3) it certainly was not a full and pure aspirate.[2]

## II. *The Text of the* barxe-*fragment.*

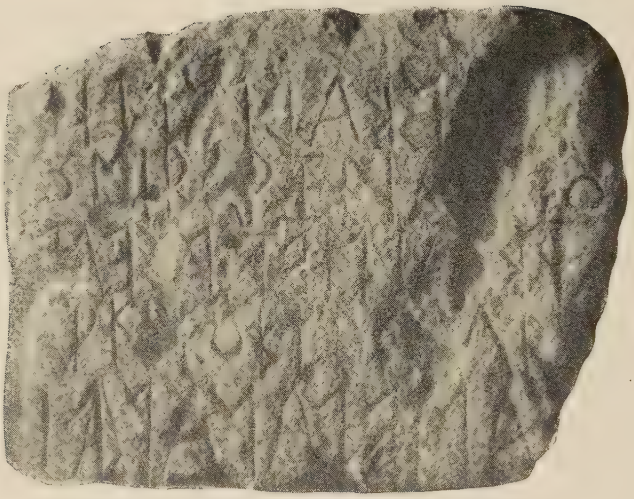
§ 14. Let us now consider the insc. previously discovered, which for clearness we will call the *barxe*-fragment. (Comparetti, *Mus. Ital. Antich.* II. 673; A. J. Evans *J.H.S.* xiv. p. 355 and xvii. p. 375). The photograph is Mr. Evans'; the transcription is mine[3] from an impression kindly sent me by Mr. Bosanquet. Some questions which suggested themselves to me have now been answered by Mr. R. M. Dawkins, of the British School, who kindly writes to me from Candia the result of his scrutiny of the stone on two occasions; his notes are initialled in what follows.

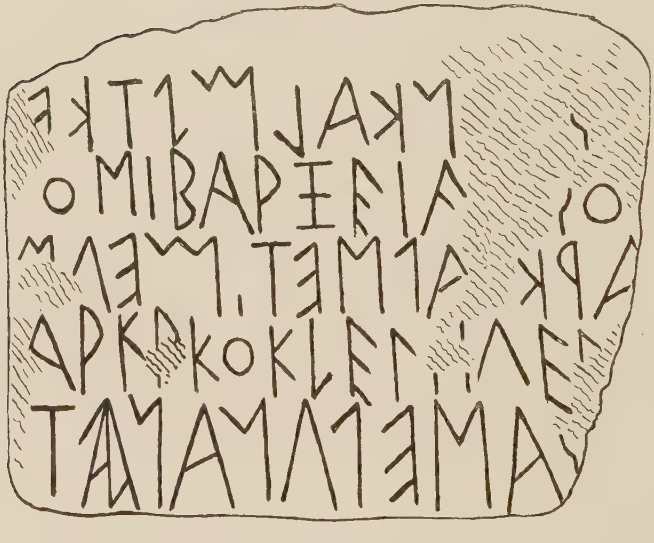
---

[1] See below § 22.

[2] Mr. Bosanquet tells me also of an insc. (of the 1st cent. B.C.), from half-way between Candia and Praesos, containing what is explained by Hiller von Gärtringen (*Hermes* 1901, p. 452) as an epithet of Hermes, spelt *κυφαρισσιφα*. We know too little of this form, or indeed of the Gr. *κυπαρισσος* itself, to be greatly helped, but it is certainly to be observed that both in this form and in Πραῖσος the *p* is followed by *r*, which may have caused in this dialect, as Prof. Ridgeway suggests to me, some kind of aspiration in the pronunciation of the preceding explosive. One or two of the more isolated forms discussed by Gustav Meyer, *Gr. Gram.*² § 207, may be due to parallel dialectal changes.

[3] I have to thank the acting editor, Mr. Cecil Smith, for very kind help in securing a correct engraving.





The stone, as I learn from Mr. Dawkins, is smooth upon its left, its under, and its hinder surfaces; and has regular 'toolings' on these, *i.e.* rows of parallel shallow cuts (I suppose to hold mortar). The top surface also is fairly smooth, with similar marks, except for chippings at either end, and except that the whole surface is more weathered than the others. The upper edge of the face above l. 1, is intact save for a length of 2 in. on the left (of the spectator) and 3 in. on the right. There is not room for another line between l. 1 and the edge, but a margin about half as high as any one of the lines of letters. It is certain therefore that the insc. is complete above, below, and on the left, and that we possess its conclusion.

On the right, however, the existing edge runs obliquely across the lines, the side is weathered and shows no 'tooling'; and the insc. is clearly broken away here.

On the top surface, which is not horizontal but slopes slightly backwards, there is an oblong 'slot' or socket, from ½ to ¾ in. deep, whose length (1½ in.) runs at right angles to the length of the stone. This must have been made to hold a stanchion or clamp. Mr. Dawkins ingeniously conjectures that it would originally have been placed in the centre of the top surface (it is now just above[1] and behind the *k* of (*nkalmit*) and that therefore we may infer how much of the stone is lost, namely, enough to leave eight letters space to the right of this *k*, *i.e.* some seven letters in this line and three or four in the rest. This may be so. But it is equally possible that the stone we possess may contain at most only half the insc., the adjacent part having been graven on a stone cut to fit the sloping right hand edge of the stone we possess, and clamped to it on the top by a bar with a cross piece 1½ in. long at either end to fit into the slots. This is rather suggested by the position of the slot, which would more probably have been cut with its length not at right angles but parallel to the length of the stone, if it had been meant to receive a clamp to hold the stone from falling forward as Mr. Dawkins suggested. I fear, therefore, we have no trustworthy clue to the proportion of the insc. that has vanished. Our block might even be only the lefthand-most of three.

§ 15. The following letters seem to be certain (I write them l. to r., the insc. being *βουστροφηδὸν*, and the first line running from r. to l.):

Α *a*, Β *b*, 𐌄 *e*, ʃ *i*, Κ *k*, L *l*, 𐌌 *m*, Ν *n*, Ξ *ξ*, O *o*, Ρ *r*, Μ *s*, Τ *t*, Λ *u*

(which last, however, Comparetti read as γ).

The difference between these characters and those of the *nomos*-insc. appears to be merely one of time; as will be seen by looking at any of the older monuments of the Ionic alphabet (Roberts, *Greek Epig.* pp. 23–38). It is not far removed from that of the earliest inscc. of Gortyn (*ib.* **9***a* and *b*), Lyttos (*ib.* **10***a*), and greatly resembles the earliest from Axos (*ib.* **11***a*), from which it only differs in using L instead of ᛚ(λ), Λ instead of V, ʃ instead of ϛ ("crooked iota"). and, as I suppose, ᚦ instead of Λ (γ). It seems distinctly more archaic (*e.g.* with 𐌄, not E, and 𐌌, not Μ) than the alphabet of the older Gortyn inscc. (*ib.* **9***g*), and it would therefore seem from Roberts' data (p. 54), that this fragment, if it were in Greek, could not well be later than 600 B.C. But a small town like Praesos might well lag behind Gortyn by many decades; and it is reasonable to suppose that a new Greek alphabet would be adopted later by Eteocretans than by Greeks. In fact, as Mr. Roberts reminds me, it is never safe to fix too narrowly a date after which we hold it impossible for archaisms of this kind to survive. In this case he thinks it would be rash to infer from the alphabet that the insc. was necessarily earlier than 500 B.C.

---

[1] 'Its centre lies about ¼ in. to the left of the hasta of ɤ.'

§ 16. It has been generally assumed that the hasta in l. 2, (3rd and 9th sign from the left), and in l. 3 (fifth sign from the left) is merely an interpunct as at Gortyn (Roberts, p. 40); since "the crooked *i*" (↿) is quite clear in l. 1 and in the conjoint letter Ѧ *ai* in l. 5, the hasta cannot well be an *i*. If it be an interpunct,[1] it is perhaps omitted in l. 5, where the last word has been identified (*e.g.* by Evans *l.c.*) as the name of the Perso-Egyptian goddess Anahit, Ἀνάιτις.[2] Here, as appears from the conjunct letter, the engraver was short of room: but if we hold that he omitted the interpunct here, I do not think we can be sure that he used it with complete regularity elsewhere; so that I am inclined to assume in l. 1 that a word ends at -*mit*, since the same ending is possible in the *nomos*-insc. (see below § 29.)

§ 17. If ΝΛΝ ends a word (and even if not), it is practically certain that Λ is a vowel, namely *u*. The ending -*un* occurs clearly in the *nomos*-insc. If with Comparetti we took Λ = γ, we should have πγν for our ending and be obliged to make -ν syllabic; and this collocation of sounds, whether final or medial, seems to me unlikely, even apart from the difficulty of taking ↾ as = π.

§ 18. The sign ↾ which is quite clear in l. 3 and l. 5 must be either γ or π. I know of no examples of ↾ with the value π save in Etruscan or Etrusco-Italic, and fairly late Roman inscc. (133 B.C., see *Ital. Dial.* p. 461). No such form can be found in any of Roberts' tables (*Gr. Epig.* pp. 382–91); the only form at all like it is the rounded Ր at Eleutherna (*ib.* p. 46), but this alternates with ᚹ. On the other hand ↾ appears as γ in Boeotia and at Locri Opuntii (*ib.* p. 388–9), and as it is precisely with these alphabets that our alphabet shares ᒪ for λ, γ is far more probable. It cannot be λ since we have ᒪ twice; and we have then to recognise the group -γσ- (in l. 3) beside ξ in l. 2, and conclude that they represented (at least slightly) different groups of sounds.

---

[1] It was suggested by Mr. A. E. Cowley, in the *Athenaeum*, March 16, 1902, that the hasta was used to mark off the proper names [like the 'cartouches' in Egyptian hieroglyphic inscc.] and he proposed therefore, to regard *Barxe* and *Agset* (which he read *Apset*) in that way. But there seems some difficulty in supposing that two names in two separate lines, which can hardly both refer to one person, and which come too far from the beginning (see § 20) to be naturally referred to the person, if there was one, whom the insc. chiefly concerned, should be decorated in this way, especially if *Anait* is thrown in without any such token of respect. But I quite agree that, if they were proper names, they would not suggest an I-Eu. language.

[2] See below § 30.

§ 19. The following notes, mainly from Mr. Dawkins, relate to the doubtful signs.

In the first line, which runs from r. to l. the first visible sign, which stands above the last *o* of the next line, is "the bottom of a vertical hasta," [R.M.D.], but "there seems to be a trace of a circle as for φ, thus ϛ."

"The sign after the ⋊ is, I think, ヨ, the top and the middle bars being fairly plain." [R.M.D.] On the impression there is also fairly clear evidence of the upper half of the vertical.

In l. 2, "the space allowed to the third sign is not more than that given elsewhere to the hasta interpungens. This, and the vagueness of the cross-piece (†) make it probable that the latter is accidental."

In the last sign but one, "one can only be certain of the bottom of a vertical, though there is perhaps a bit of a circle left (thus ϒ) on the edge of the gash that crosses the stone."

In l. 3, "as to the signs after the first ⋊, the A is, I think, certain, but between this and the ⋊ the stone is broken away, leaving no part of the intermediate letter." [R.M.D.] But the space left would only suffice for a hasta, or one of the narrower letters, not for either Λ, A, M or ꟿ.

"The two signs at the end of the line seem to be V⁝ Λ. The first of them I take to be Λ, because the right-hand stroke slopes at an angle and is not perpendicular as in ⅂. The second of these two signs (*i.e.* that on the left) seems to be Ч, not M, because there is no trace of a second perpendicular, and at the point where the third stroke ends, the stone does not seem broken away. But the sign is possibly ꟿ rather cramped up, as being at the edge of the stone, which seems to show traces of the 4th or 5th (*i.e.* the two left-hand-most) signs of this letter." [R.M.D.] On the impression also I seem to recognise the fourth stroke, slanting downwards towards the left.

The fourth sign from the right of l. 4 is badly broken. Comparetti read it as φ. All that remains is the lower tip of the hasta, and possibly the upper also, and a faint stroke slanting upwards above the lower on the right. There seems however to be a rounded break in the middle of the line, which might be the whole globe of Φ bodily broken away. "The sign in question seems to be only the hasta interp. It has allotted to it exactly the same space as that in l. 3, and the possible hasta in l. 2 between M and B, and even a little less than the next hasta between ϟ and A. The letter before is M since the lower tip of the second hasta remains." [R.M.D.]

The last letter of this line may be *s*, *n*, or *m*, or even *g*; only ᚦ is left.

In l. 6 "traces of a φ can, I think, be made out before the first *a*. The group after *e* is, I think, certainly ЧΛ⅂." [R.M.D.]

§ 20. The stone, as we have seen, is complete on the left hand, and the first letters come beneath one another with some regularity.

Since it is *βουστροφηδὸν*, it is best to transliterate it two lines at a time; we have then

1, 2 . $\overset{?}{\underline{\phi}}$ . . nkalmitk$\underline{\text{e}}$os barxe a . . $\overset{?}{\underline{\phi}}$o

3, 4 ark ? $\underline{\text{a}}$gset meu$\overset{?}{\underline{\text{m}}}$ark$\underline{\text{r}}$kokle$\overset{?}{\underline{\text{s}}}$ ue$\overset{?}{\underline{\text{s}}}$

5 . . $\overset{?}{\underline{\phi}}$asegunan$\underset{\smile}{\text{ai}}$t

§ 21. If the sign after *ark* in l. 4 is really *r* (and the upper two-thirds of it (ṛ) is quite plain in the impression [and the stone R.M.D]), it must be syllabic.

The query after *k* in l. 3 indicates the doubt whether any letter is missing there or not.

## III.—*Other Sources of Information.*

§ 22. Before we proceed to consider these inscc. further, it is well to notice what other scanty means we have of learning something of the language of Praesos. It will be seen that my object is merely to collect from such trustworthy sources as are accessible to me, any material which may possibly contain or illustrate Eteocretan forms; not to discuss the history of the district, nor even to offer a complete list of place-names; much less to enter into topographical questions which can only be profitably dealt with on the spot.

First, Mr. Bosanquet tells me[1] of two other forms, found inscribed in the same neighbourhood: one is on three discs of terracotta pierced for suspension, and therefore probably labels. Each of the discs bears the legend ΣΜΩΡ. The other form is on the broken lip of a pithos and is probably incomplete at the beginning: it seems to be the possessor's name in the Genitive . . . ΠΑΝΣΩΝΟΣ.

Here we may remark that the appearance of ω beside ο seems to separate the word from our two inscc. where we have only ο; and therefore at present it would be unwise to assume that the forms belong to anything but Cretan Greek. On the other hand the form σμωρ, however abbreviated it may be, does not suggest any Greek word. The word σμίνθος 'mouse' is called Cretan by some authorities,[2] and the comparative rarity of the initial group σμ- in Greek,[3] makes the coincidence of the two words just worth notice, as suggesting that they may both be Eteocretan. It is a noteworthy coincidence that the same initial sounds appear in a month-name at Magnesia (see § 24), Σμισίων, Dittenb. 553. 1. Note also the similarity of the ending to that of Λαβύρινθος and the Cretan places Σύρινθος, Πύρανθος, and the Cretan month Ῥαβίνθιος (Kretschmer,[4] *Einleitung in d. Gesch. d. Griech. Spr.* pp. 402 f.), not to add the *Cnosius Rhadamanthus*. See also below § 31 f.

§ 23. Of the other forms mentioned as Cretan and collected by Meursius *Creta* (p. 255)[5] we may note

(1) Forms which show the change of αλ to αυ before κ, σ, μ (αὐκὰ, αὑμὰ, αὗσος), and

(2) Those showing the change of ελ to ευ before γ (θεύγεσθαι), since neither of these changes has yet been found in any Greek dialect of Crete:

---

[1] In a letter of October 2, 1902.

[2] Tzetzes in *Lycophr.* 1307; Schol. Ven. ad Il. 1. 39; cf. Strabo 13. 1. 48., p. 604.

[3] Most commonly σμ- became μ- *e.g.* in μία for *σμ-ια, cf. Lat. *sem-el.* The precise conditions of this change have not been determined for any of the dialects.

[4] Kretschmer does not give the sources from which he takes these names, and I have not been able to ascertain in what part of the island the places lie. Σύρινθος, Πύρανθος are from Steph. Byz.

[5] I owe this reference to Mr. Bosanquet.

(3) Also the following single forms:

ἄκαρα· τὰ σκέλη, Κρῆτες
ἀμήτορες· κιθαρίστας, Κρῆτες } Et. Magn. and Hesych.
*asplenum* 'hac curant lienosos' Vitruv. I. 4.

and the heroine Βριτόμαρτις (Strabo, 10, 4, 12 p. 479) which Solinus (11) explains as meaning 'dulcis uirgo.' Her temple stood on the 'Chersonese' which formed the emporium of Λύττος ('ἣν ὁ ποιήτης[1] Λύκτον ὠνόμασεν' Strabo ib.) a town lying East of Cnossus, on the North-west slope of the Dictaean range. From Hesychius[2] we may further perhaps cite a few Cretan forms which do not seem to possess an obvious etymology in Greek, nor to show obvious marks of Cretan Doric such as *e.g.* the special treatment of -σθ- (Gortyn -θθ-, Axos -στ-).

ἄγδυς· ἄγγος Κρητικόν
βέλλιον· ἀτυχές, Κρ.
βρίτυ· γλυκύ, Κρ.
γάρσανα· φρύγανα, Κρ.
δίβαν· ὄφιν, Κρ. (also δίφαν id.)
δροῖον· καλόν Κρ.
ἰόβας· κάλαμος παρὰ Κρ.
μαλκενίς· ἡ παρθένος· Κρ.

Further the name of the healing herb *dictamnum* which Venus plucked from Cretan Ida (Verg. *Aen.* 12, 412) can hardly be separated from Mt. Dicta, and the form of the derivative is so unusual in Greek as to suggest that it belongs properly to the language of the folk in whose territory the most celebrated end of that mountain lay: cf. ὁ Σέδαμνος and *Rhithymna* below (p. 138).

§ 24. There are two Greek inscc. which concern Praesos; one of the (early) third century B.C. (Dittenberger, *Sylloge*, 427), the other of 139 or 133 B.C. (ib. 929). The first is a gracious concession of certain privileges by the town of Praesos to its two subject communities situated on the coast to North and South respectively, Praesos being on the top of the ridge inland. The inhabitants of these towns are called respectively Σταλῖται[3] and Σηταῆται, (the first town being named as we know from Stephanus Στᾶλαι). Praesos is not named, but its inhabitants are called Πραισίοι.

The other insc. is an award of certain arbiters from Magnesia, in Asia Minor, upon a dispute between the two Cretan towns, Ἱεράπυτνα and Ἴτανος, which lay respectively on the coast to the South-west and North-east of Praesos; between them, and their quarrels, as we learn from this insc., the unhappy Praesos was crushed out of existence at some date between 146 and 139 B.C. The two survivors, however, still quarrelled over their boundaries, until the Romans ordered them to submit the matter to the arbitration of their ancient friends (and presumably kinsmen[4]) in Magnesia ad Maeandrum (just at the junction of Ionia, Lydia, and Caria). Accordingly 15 Magnesians heard the pleadings of both sides and gave their award. In the course of this document they describe the boundaries between Hierapytnaean and Itanian territory, and as the line was drawn close to the lands of the extinguished Praesos, it seems likely that some at least of the names of the land-marks mentioned may belong to the language of that town. These are

---

[1] *Iliad*, 2, 647.

[2] I have to thank my friends Professor Flamstead Walters for his kindness in verifying these glosses and some other references in this section, and Mr. H. T. Francis of Caius for similar help.

[3] I take the accents in this section from Dittenberger, but I imagine they are mainly conjectural.

[4] The antiquity of their friendship, 'to all the Cretans (Κρηταέεις),' is described rather wordily in ll. 22–25: it was 'attested by oracles and all men's knowledge.'

οἱ Δραγμίοι (mentioned as formerly neighbours of the Itanioi).
ὁ Σέδαμνος, a river.
ἐς Καρύμας, a place, (? Gen. Sing, or Acc. Plur.)
ἁ Στεφάνα, a circle of some kind, '*περιαμπέτιξ ὡς ἁ στ.*'
ἐς Δορθάνιας (? Gen. Sing. or Acc. Pl.),
ὁ λάκκος.
ὁ Μόλλος.
ἁ δηράς.
(δὶ)"Ατρων(α).
οἱ Πραισίοι.

We may note also that the temple of Dictaean Zeus was outside the territory in dispute, 'enclosed by walls and other boundaries and signs'; the Itanians 'proved that the disputed territory had been cultivated, and was not as the Hierapytnians alleged, sacred and untilled.'

In Itanian possession were the tract of land called Ἐλεία (North of Praesos), and the island Λεύκη to the South.

§ 25. Turning now to Strabo (10, 4, 6 ff. p. 475), we find that, according to Staphylos, Praesos was the town of the Eteocretans, where was the temple of Dictaean Zeus; and that the same writer assigned to the Eteocretans the South of Crete, to the Dorians the East, and to the Cydonians the West. Strabo adds that presumably the Eteocretans and Cydonians were autochthonous.

It may be useful to add here the few remaining names of places mentioned by Strabo which lay within a reasonable distance of Praesos, *i.e.* in the Eastern third of Crete, East of a line[1] drawn, say, from Cnossos to Gortyn and Leben. They are

ἡ Κνωσσὸς.
Καίρατος, a river flowing by Cnossos,
'Αμνισὸν (? -ὸς) the old emporium of Cnossos,
Μίλητος, on the coast North-east of Lyttos.
Μινῴα, a little further East, at the South corner of a bend in the North coast, West of Praesos.

Λεβήν and Μάταλον, the South-east and South-west emporia of Gortyn, and Ληθαῖος, a stream hard by. A lover from Leben was commanded to fetch as a pledge of his affection 'the dog[2] in Praesos.'

---

[1] Of names west of this line (excluding pure Greek formations like Κρίου μέτωποι, and adding in italics names taken from Pliny 4. 20. 59) we may note, proceeding from E. to W., on the North, *Eleuthernae*, 'Αμφίμαλλα, *Rhithymna*, Κίσαμος, 'Απτέρα, Κυδωνία, Τίτυρος ὄρος, *Pergamum*, Δικτυνναῖον ὄρος, Κίμαρος (prom.) Φαλάσαρνα, and on the south ἡ Γόρτυν, 'Ρύτιον, Φαῖστος, Λίσσην, Φοίνιξ ὁ Λαμπέων, the island *Gaudus*, and in the centre the mountain ridge of *Ida* ("Ιδα) continued in the West by that called τὰ Λευκά. I add these names here because it seems likely that the Eteocretans once occupied a larger area of the island than that to which we find them confined in historical times.

[2] This proverb has been kindly explained to me by Dr. Jane Harrison. Pandareus, King of Lycia, stole (or received from Tantalus, who stole), the golden dog of Minos, a life-like work of

Δίκτη, the sacred town and mountain lay close to Praesos; the town was at the East end of the ridge.

Σαμώνιον, the North-east extremity of Crete.

From the coins of the district we learn further the names Ἀρκάδες (Head, *Hist. Num.*, p. 387), *Bianus* (p. 388), *Otus*, Ὀλόντιοι (p. 400), Πριάνσος, Πριανσεῖς (p. 404), Ῥαῦκος (p. 405), Τυλίσιοι (p. 406).

From Pliny (4, 20, 58 Sillig) we may quote some of the islands off this part of the coast: *contra Itanum, Onisia, Leuce, contra Hierapytnam, Chrysa . . ., eodem tractu, Butoa, Aradus, ante Sammonium promuntorium . . . Sirnides . . . Armedon.*

§ 26. Finally I should perhaps mention a remark of Agathocles quoted by Athenaeus (9. 376a) to the effect that 'all' (*i.e.* the Cretans) think the pig very sacred and will not eat it, because it suckled the infant Zeus on Mt. Dicte, and that 'the Praesians even sacrifice in honour of[1] a pig (ἱερὰ ῥέζουσιν ὑί) and this is counted the initial rite (προτελῆς) of their sacrifices.'[2]

## IV.—*Notes and Queries on the Language.*

§ 27. It will be worth while, I think, to consider certain points which appear on the first view of the inscc., and to state some of the questions which the phonetic and apparent morphological character of the legible words suggests.

The endings which are certain are,

(*a*) in the *nomos*- insc.

(i) *-sφa*, *-ano*, *-mun*, *-tat*, *-ona*, as coming at the end of a line (§ 2 sup.); *-nai* also in l. 2 where the reading is practically certain.

(ii) *-ala* as coming before *φraisoi*- in l. 2 and *-los*, as coming before *φraiso*- in l. 6; and hence probably *-mos*, since one naturally takes *-nomos elos* together.

(*b*) in the *barxe*- insc.

(i) as coming before interpuncts *-os*, *-rxe*, *-set*.

---

Hephaestus, which had stood in the precinct of Zeus. When Hermes came to demand the dog back, Pandareus denied that he had ever had it, but the dog was found, and the thief punished. One of the versions of the story is illustrated by an early black-figured vase in the Louvre (Pottier, *Cat. A.*, 478, pl. 17. 1). For further details I must refer the reader to c. v. of Miss Harrison's forthcoming work on *Greek Ritual and Religion*, or to the Art. *Pandareus* in Roscher's *Lexicon of Mythology*.

[1] This is the only meaning of the Dat. after ῥέζειν recognised in L. and S., and it is common. The victim stands always in the Acc.

[2] My friend Dr. J. G. Frazer has kindly called my attention to a curious account of some pre-Hellenic customs at Phaestos recorded by Antonius Liberalis, *Metamorph.* 17 *ad fin.*: there was a festival called the ἐκδύσια, in honour of φυτίη Δητώ, and in memory of a miraculous change of sex. See further *Am. Journ. Archaeol.* 3. 458. If any weight be attached to the statement of Staphylos quoted above, Phaestos may have been originally Eteocretan, since it was the southernmost town of any note in Crete.

(ii) as coming before *Anait*, if that name be rightly separated (§ 16), *-gun*; but this rather belongs to the 'probables' of the next section.

§ 28. The following points seem to me highly probable in the *nomos-* insc.

(i) *-tsa* in l. 7 seems to end a word, since, if not, *-tsaado-* would offer with *φraisoiinai* the only examples in either insc. of doubled vowels: this would naturally carry with it the *-sa* in l. 4 and l. 6, leaving *nomos* and *tois* as complete words.

(ii) *tois* in l. 4 is probably separate from *ste-* since there is no other doubled consonant, and we have just seen that it is probably separate from the preceding *sa-*.

(iii) At these points (*sa-nomos-elos-* and *tsa-ado-*, less clear at *sa-tois*) there appear to be interpuncts (§ 5 sup.), and though Mr. Bosanquet's view that they are all accidental makes it impossible to lay stress upon them, I still venture to think that the occurrence, even if slightly irregular, of interpuncts on the older insc. (§ 16 sup.) makes it *a priori* likely that we should find some on this. Hence I am inclined to trust the appearance on the photograph and impression of a fairly solid interpunct after *-animest* in l. 5. Of the other puncts mentioned in § 5 as being "faint but possible," I am prepared to accept Mr. Bosanquet's view.

(iv) Mr. Bosanquet is confident, after repeatedly examining the stone, that the letters *irere* are the last in the broken l. 8 and occur also in the middle of l. 9, the whole of which he reads . . . *ire irereiet*. Now this does not prove that *irere* is a single word,—for instance we might find *irereiet* in l. 8 too if we had the whole of it—but it does show that *irere* must be treated at least as a unit element and separated from the preceding letters *ire* in l. 9 and *ina* in l. 8.

Its recurrence makes it at least probable that we have to do with a document of a formal nature, either legal or religious, or both. That it is a religious document is further suggested by the fact that a vanishing tongue is preserved longest in religious use; just as Welsh in some parts of Wales to-day.

---

The two words *ire irereiet* have a strange though not complete resemblance in endings to the Umbr. perf. opt. *stiti steteies* "steterit steterint" *i.e.* "(whenever) he or they may have stood."

§ 29. We have now by purely graphical evidence, without any linguistic assumption whatsoever (save that we are dealing with an inflexional language), marked off twelve certain endings (*-sφa*, *-ano*, *-tat*, *-ona*, *-ala*, *-los*, *-ina*, *-ire*; *-os*, *-rxe*, *-set*, and *-mun*) and eight probable ones (*-nai*, *-gun*, *-tsa*, *-sa* (twice), *-est*, with *tois*, and *nomos* as complete words); and perhaps we may make our eight probables into ten by taking *-mit* as the same ending in *-nkalmit* and *-epimit*.

Those who are unfamiliar with inscc. in unknown tongues may think that our progress is rather slow; to others it may seem uncomfortably rapid. But it is clearly time to take a further step and to treat the inscc. as something more than mere collections of letters and vocables. To do so it is necessary to set up a working hypothesis as to the nature of the language. Even from what we have seen there cannot be the least doubt as to what that hypothesis ought to be. But we may now advance to three general negative considerations which appear to me, for this purpose, decisive.

§ 30. (*a*) We have seen enough of these inscc. to be assured beyond any possibility of doubt that their legible portions contain no combinations of vowels or consonants which were not common in at least some two or three Indo-European languages at, say, 500 B.C.[1] The same is true of the place-names enumerated in §§ 24–5. This is remarkable: of no Etruscan[2] insc. containing even half a dozen words can the same be said.[3] The Punic fragment in the Poenulus (ll. 930 ff.) has a totally different look, though it has been copied by Latin scribes for centuries.

(*b*) Of twelve certain and ten probable endings there are none which are not common in I-Eu. languages of that date.

(*c*) I am told by several Semitic scholars whom I have consulted that the presence of π beside φ, the paucity of gutturals, and of dentals, the frequent juxtaposition of two vowels without an intervening consonant, and the presence of such a diphthong as *oi* give to the inscc. a thoroughly non-Semitic appearance.

---

[1] The one exception would be *-itsφa* at the end of l. 1 of the *φraisoi*-insc. But we have seen some reason to separate the *-sφa*.

[2] Take almost any page of Pauli's *Corpus Inscc. Etrusc.*:

No. 250 *lariś sesctna lumścial*
No. 254 *arnθ sesctna velisnal*
*larθi vezθrnei θenusa pesnasa*
No. 432 *larθi titlnei ciarθisa*
No. 425 *l aveni hapre tlapnal.*

[3] In view of some conjectures hazarded by Mr. A. E. Cowley in the *Athenaeum* (March 16, 1901), it is well to add that this negative statement applies also to Finnish, at all events so far as its vocalism is concerned. See any page of Eliot's selections (*Finnish Gram.* Oxford, 1890).

(*d*) Let us observe further that the goddess *Anait* who was taken by Mr. A. J. Evans (*J.H.S.* l.c.) to have a decidedly Semitic colour, is, as I am reminded by my friend Prof. A. A. Bevan, a familiar figure in the Zend-Avesta (esp. in *Yasht* 5). A full description of her beauties and prerogatives as a feminine counterpart to our old friend *Apām napāt* of the Ṛig Veda, is given by Spiegel *Eranische Alterthumskunde* ii. p. 54. She is frequently mentioned by Strabo[1] and other writers as being worshipped also in Armenia and Pontus, and she had a great temple at Zela. Some of the features of her worship in Asia Minor, in the fourth century B.C. and later, show the corrupt influence of the Babylonian worship of Semiramis (see, *e.g.* Frazer, *Golden Bough*$^2$ III. p. 160 with his references); but it is clear that in origin she is Persian and therefore her name need suggest no Semitic affinities for any language in which it occurs. Indeed, seeing that 500 B.C. is the latest date which we have found probable (§ 15) for this *barxe*-insc., the goddess, if she did reach Crete, is perhaps more likely to have done so from Persia through Asia Minor than through Egypt, as appears from the relevant dates (Bury, *Hist. of Greece*, p. 230 ff.);

| | |
|---|---|
| Persian Conquest of Lydia and Ionia ... ... | 546–5[2] B.C. |
| Submission of Cyprus ... ... ... ... ... | circa 538 |
| Adhesion of Polycrates of Samos ... ... ... | 526 |
| Conquest of Egypt and Cyrene ... ... ... ... | 525 |
| Suppression of Polycrates ... ... ... ... ... | 523 |

Mr. A. J. Evans (*J.H.S.* xvii. p. 375) was inclined to compare the word *barxe* with the Carthaginian town *Barca*; but no Semitic scholar whom I have been able to consult can suggest any method of connecting the forms. In spite, therefore, of the many links between Cretan and Egyptian culture which Mr. Evans has brought to light (*J.H.S.* ib.; cf. also Bury. *Gr. Hist.* p. 7 ff.) we have no substantial warrant for adding this insc. to their number.

§ 31. Let us set to work then on the working hypothesis that the language of these inscc. belongs to the I.-Eu. group,[3] and see whether it lands us on any firm ground, in mere fog, or on the rocks. In dealing with such battered fragments we shall be extremely fortunate if we can escape the third of these possible fates; and until we can obtain some further material, we cannot expect the fog to lift from more than a small portion of the texts before us.

---

[1] *e.g.* 11. 8. 4 p. 512 and 11. 14. 16 p. 532. Other references will be found in Spiegel l.c.

[2] Or 541, according to Busolt, *Griech. Gesch.*$^2$, ii. p. 502.

[3] [After this paper was in type I received from Mr. Bosanquet a few brief expressions of opinion sent to him by scholars to whom he had submitted photographs of the *nomos*-insc. It is

We observe

(*a*) that the language possesses all five vowels, *a i e o u*, some of which at least probably represent the same original sounds; but that we know nothing of their quantity—nor of any varieties of quality such as were indicated, for example, by η and ω in the full Ionic alphabet or by the crossed i (⊦) in the Oscan alphabet.

(*b*) that the language possessed the diphthongs *ai* and *oi*, and used them in places where they look original (in terminations, and in the word *tois*),

---

best to quote them as they stand, though some of the suggestions are excluded by our improved text.]

M. Salomon Reinach writes: 'I am convinced that the language is Aryan, though by some strange chance the last word of the first line is pure Semitic.' [M. Reinach seems to be thinking of the Heb. *mitsvah* 'commandment.']

M. Bréal writes: Tout inconnus qu'ils soient, les mots *sermonem redolent Graecum.* On peut supposer quelque dialecte grec ayant son aspect particulier, et dont les règles se laisseraient voir si l'on avait un spécimen moins court et moins mutilé. Dans l'hypothèse grecque, on pourrait signaler le mot ἔστε trois fois répété (l. 3, 4 et 5). Ce mot, ainsi que la répétition du nom de Praesos, pourrait faire croire à une délimitation de territoire.

Le mot finissant en -σατο (l. 3) a l'air d'être répété à la ligne suivante.

Hactenus mihi videor satis tolerabiliter potuisse dicere. Reliqua rectius omittam.'

Prof. A. H. Sayce writes: 'The inscription found some years ago on the site of Praesos which I will call Pr. I. falls into two clauses, each of which begins with a word, or words, with the suffix *-s*, and therefore presumably in the Nom. Sing., and ends with a word with the suffix *-t*, presumably the 3rd pers. of a verb. I read . . νκαλμιτκ[ι]ος βαρσ̂ε α . . οα(?)ρκ . απσετ Μεγ[σ]αρκρκοκλες γε . . ας ἐπγναναιτ. Perhaps the second word is an early form of the name of Praesos.

'The newly discovered inscription, Pr. II., can similarly be broken up into two initial clauses each with its Nominative and 3rd person of the Verb. We must assume that, as in Pr. I., so in Pr. II., the perpendicular line can denote a division between words as well as the letter ι. Accordingly we get: . . . οναδεσεμε τεπιμιτ σφα . . . [σαα?] δοφ . . . αραλα Φραισοι ιναι . . . . ρες, and . . . κανομος ελος Φραισον . . . [ι]τ σααδοφ τενο . . . μαγρα ιναι ρε . . .

'In the bilingual (Mysian and Greek) inscription discovered on one of the columns of the temple of Athena at Pergamon we find similar grammatical forms in the Mysian text. The Greek has Παρταρας Αθηναιηι, the Mysian U-ÿ-*-t-a-i . . . . B-a-r-t-a-r-a-s p-a-u-i-t. I would compare the divine name μητρι Ἰπται found by Prof. Ramsay in an inscription at Goelde in Lydia, and translate: "to Vipta . . . Bartaras has dedicated."'

[The fulness with which the epigraphic data have been treated in the opening sections of this paper precludes me from entering into any discussion of these suggestions, as it would involve fruitless repetition. This is a convenient place to mention that in the *Times* of April 1st, 1901 (or some closely adjacent date) Col. C. R. Conder proposed to recognise the *barxe-* insc. as Indo-European, adding an adventurous 'translation.'—R.S.C.]

(*c*) but that only one -*u*-diphthong (*meumarkr-*?) occurs, and no tauto-syllabic *ei*; the ending -*eiet*, if it be an ending, shows the -*i*- only as a consonant between two vowels. (Something must have become of these diphthongs, esp. the very common I.-Eu. *ei*. We should naturally infer that it had changed to *e* or *i*—the former occurs more frequently, and perhaps in the most suspicious places, *e.g.* in the second syllable of *irere-*, and in *elos*).

(*d*) Final -*t* appears in what look like the 3rd persons (Sg. or Plur.) of Verbs (-*epimit*, -*nkalmit*, -*agset*, -*gutat*, *irereiet*) but not elsewhere. This is a marked divergence from Greek.

(*e*) We have identified at present no example of final -*d*.

(*f*) Intervocalic *s* appears to be preserved in *φraiso-* but here and in other forms possibly containing it (-*desiemet*, *steφesiamun*) we could not be certain that originally it was a single -*s*- or an *s* at all. But the impression of its singleness is confirmed by some of the place-names of the district immediately round Praesos (§ 25): Ἀμνισὸν, *Onisia*, and the island *Chrysa*.[1] Somewhat further off, though still in Crete, we have Κίσαμος; (it would be imprudent to lay any stress on the -σ- of the month Σμισίων, so far off as Magnesia, § 22 sup.)[2]

The name *Chrysa*, which I see no reason to doubt (the MSS. of Pliny[3] agree in -*sa*) seems to supply a needed etymological link of some interest. The word χρυσὸς with its single -σ- is a puzzle in Greek, and has no clear Indo-European congeners. It was long ago suggested by Pott[4] that it came from the Hebrew *chârûts*; but by what route? What more likely intermediary than the brilliant court of King Minos, and an island long the half-way house between Egypt and Europe?[5] I venture with some confidence to add χρυσὸς to our list of Eteocretan words. Observe also that *Chrysa* is not Greek; the Greek derivative would be χρυσέα. Nor does the importance of the name end here: for, as every one knows, the same name appears in the Troad (ὃς Χρύσην ἀμφιβέβηκας, *Il.* I. 37—not Χρυσῆν) and with others long since pointed out (Ἴδα,

---

[1] Kiepert's map gives *Chrysea*; his authority I cannot find though I have searched the Indices to many Greek authors. If (as often in Kiepert) it be one of the later geographers, Pliny is clearly a better source.

[2] The temple of *Athena Salmonia* near Itanus (Head, *Hist. Num.* p. 398), a sea-goddess, shows that *initial s*- in this region was preserved as in Lat. *sal*, not changed to *h*- as in Gr. ἅλς.

[3] See Sillig's critical note *ad loc.*

[4] *Etym. Forsch.* i. 141.

[5] Bury, *Gr. Hist.* p. 7 ff.

Πέργαμον) connects Crete with the Trojans; and not Crete merely but the Eteocretans. Further it is at Chryse in the Troad that stood the temple of Apollo Smintheus and we have already (§ 22) seen reason for suspecting that σμίνθος is Eteocretan. No wonder Πέργαμον and Κίσαμος show the same suffix—to which too that in the river Σέδαμνος (§ 24) is akin.

This retention of -σ- between vowels separates Eteocretan from Armenian, Greek, and Celtic (where it disappeared); from Zend (where it became -*h*-); from Latin and Umbrian and Teutonic (where it generally became *r*); and ranges it on the more primitive level of Oscan, Venetic[1] and Messapian (*e.g.* Ven. *Laso* Pauli p. 324; *Padusa* fl.; *Brundisium*); of Phrygian probably (*akaralasun* (others read it as -γαζυν) *esurzozoz*, *zosesait* appear in the inscc. collected by W. M. Ramsay *Journ. R. Asiat. Soc.* xv. (1883) pp. 128 ff.—not to mention Χρύση and other names in the Troad); and of Sanskrit.

Even if we yielded to an obvious guess and took *tois steφesi* (?) as a Loc. or Inst. Plur. the *s* would probably be written for -σσ-; that at least is certainly the earlier sound in this Case. But I doubt the wisdom of supposing that the Dat. Plur. in Eteocr. ended in -σι; the -ι(ν) is almost peculiar to Greek in this form. And anyhow it would be rash to assume that *tois* has the meaning merely of an Article. A possible division of the words which suggests itself is *steφe siamun*, 'to which (or 'to them') Siamon was a boundary[2]; on -*e* cf. § 34 (ii) below.

(*g*) There is one example of consonantal *u* before a vowel, *ue*- in l. 4 of the *barxe*-insc. and the diphthong *eu*- appears as we have seen.

(*h*) So far as we may trust the identification of Χρύση, χρυσὸς as Eteocretan forms, it combines with the φ in Φ*raisoi* (beside Πραῖσος § 13 sup.) and in *steφe*-, and ἁ Στεφάνα (§ 24) and the θ of Δορθάννας (*ibid.*) and the ending -(ι)νθος, confirmed by the aspirates in Φαῖστος and *Rhithymna*, which were places only slightly further off, to suggest that the Eteocretan sounds denoted by φ, χ, θ did not differ widely from the Greek aspirates, though, as we have seen (§ 13) *φ* was probably not quite identical with the Greek *φ*, and though the occurrence of *-φt-* (see below) shows that in the fourth century B.C. *φ* was at least partly spirantic as indeed the aspirates were even in Attic by that time.[1]

---

[1] Pauli himself was under a misconception on this point, as Kretschmer (*Einleit. in d. Gesch. a. Griech. Spr.* p. 275) remarks. The examples of -*s*- are abundant.

[2] Some other possibilities as to σιαμων may perhaps be set down here, though no one of them can become in the least probable without further evidence: (1) Mr. Cecil Smith tells me of an epithet or surname of the sun-god or moon-god Men, which appears in Lydia and is spelt τιαμου (Waddington, *Inscc. d'Asie Min.* p. 215; Ramsay, *Cities*, *etc.* i. p. 341). It is conceivable that τια- and σια- should be different attempts to represent the same (palatal ?) sound in Greek alphabet. (2) In the 'Sequanian' Celtic Calendar of Coligny (*Comptes Rendus de l'Ac. d'Inscc.* 1897, 703) one of the winter months is called *Giamon*, and (3) another month, sixth earlier in the list in the same calendar, is called *Samon*. Mr. E. B. Nicholson has printed a most interesting, if somewhat adventurous discussion of this Calendar in his pamphlet called 'Sequanian' (Nutt, 1898). Thurneysen has an article on the insc. in the *Zeitschr. f. Kelt. Phil.* 1899, p. 523).

Possibly a parallel (but further developed ?) change in the case of *-κτ-* is implied in the fact noticed in § 23 that the Homeric *Λύκτος* has become something spelt *Λύττος* in the time of Strabo.[2]

(*i*) If the language is Indo-European of the 4th cent. B.C., we shall not think it very likely for a word to end with a *φ*, whether that symbol denotes a true aspirate, or some spirantic sound ; hence we shall read in l. 7 *adoφte-*, not *adoφ te-*. Beside this we have *-oφsano*[3] at the end of l. 3. Now in what I.-Eu. languages do we find such groups as *-φt-*, *-φs-* ? We have *-ft-* out of *-pt-* in Zend,[4] Germanic,[5] and Osco-Umbrian.[6] But in Zend and Germanic the change of *p* to *f* is not closely parallel since it happens under many other conditions than that of a following *-t-*. The same is true of a parallel change in Armenian.[7] The changes in Celtic[8] (*e.g.* of *septem* into *secht n-*) are closely parallel, but here *p* was a very weak sound altogether and in fact vanished completely everywhere outside such combinations, so that it would be unwise to lay much stress on this comparison. We are left with Osco-Umbrian (*e.g.* Osc. *ufteis* = a Lat. "*opti" *i.e.* "optati, optabilis" Umb. *osatu* for **opsātō* = Lat. **operātō*[1]), with the similar Venetic *Rehtia-* 'Iustitia' (cf. Lat. *rectus*) as the nearest parallels. Now is it a mere coincidence that in Venetic also we have a feminine ending *-tsa*, for an earlier *-ti̯a*, *e.g.* the girl's name *Iiuvantsa*[2] 'Πρέπουσα'? And that the neighbouring Cretan of Gortyn is the only Greek dialect which retains the nasal in this termination *e.g.* Cret. πανσα = Att. πᾶσα? In Phrygian we seem to have a similar ending in the adj. Ουεκροκωμητισσα 'belonging to Vekrokome' (Ramsay, *Kuhn's Z.* 28, p. 395).

---

[1] On the vexed question of the date at which *θ*, *φ*, *χ* became spirantic see *e.g.* Brugmann, *Grundriss* I.², § 739, who inclines to a more conservative view. But such scansions as *φιλόσ¯φον* in Aristoph. *Eccl.* 571, point to a partly spirantic pronunciation (*e.g.* something like *-πφh-*) in vulgar Attic, although spellings like *ἕχω* in Attic inscc. (exx. in *e.g.* Meisterhans *Gramm. d. Att. Inschrr.*², p. 66) show equally that there was a real *-h-* sound in the aspirate, or it could not be imported into another syllable. But it is to be observed that this "affricate" stage had arisen in some other dialects at a very early date, and that rather numerous examples seem to come from the sources roughly grouped together as "Aeolic," Pindar and Hesiod ; cf. the Northern *Βάκχος* (see *e.g.* Gust. Meyer, *Gr. Gram.*², § 210). Latin words like *bracchium* (from Gr. *βραχίων*) carry this pronunciation back to a fairly early date in Magna Graecia.

[2] Professor Burrows points out to me that the form *Λύττος* occurs in an insc. quoted by Frazer, *Pausan.* 3, 313, the date of which can hardly be earlier, and may be much later, than 300 B.C. (See K. F. Hermann, *Philologus*, ix. p. 694).

[3] On the use *-φσ-* for *-ψ-* if it stood alone no stress could be laid as it appears in many parts of Hellas (see *e.g.* Kirchhoff, *Studien z. Gesch. d. Gr. Alph.*⁴ pp. 95, 116, 121, or the tables in Roberts' *Gr. Epigraphy*).

[4] Brugmann, *Grundriss* I. § 715.

[5] *ib.* § 793c.

[6] *ib.* § 769. Possibly in Venetic, though no examples either of *-ft-* or *-pt-* occur in the record we possess ; but *-ht-* *-hs-* appear in Venetic for an orig. *-kt-* *-ks-* (*Rehtia-*, *Ahsus*), Pauli *Veneter* p. 256, just as in Osc.-Umb. There is a small Venetic river called *Tilavemptus*, where the *m* complicates the question. The Greek equivalent would be, I imagine, *τηλε-Ϝεμετὸς* 'far-shooting.'

[7] *ib.* § 724.

[8] *ib.* §§ 774, 782.

§ 32. This brings us to the last and most perilous part of our enquiry—the attempt to identify the character and construction of some of the words in the Praesos inscc. Let us proceed as before from the more probable to the more doubtful. The reader who wishes to be prudent should either disregard altogether the paragraphs in small print, or at least be always conscious that the conjectures they contain are only offered with the very greatest reserve.

(*a*) *nomos elos* looks like an Acc. Pl., governed by the previous Partc. in *-sa*, perhaps '(observing, *or* making) those ? conditions.'

(i) *ẹ-los* may have the vocalism of either Osc. *eiso-* "this" (= Skt- *ēṣa-*) or Osc. *ĕ-ko-* "that."

(ii) An objection to identifying *nomos* with Gr. νόμους which at first appears serious, is that if the two languages coincided so closely in one word, we should expect similar coincidences in others; and there is no other such resemblance save the enigmatic *tois steφesi-*. But my friend Mr. F. C. Burkitt tells me that the Greek word νόμος was very widely borrowed in Semitic languages; and if in them, it might also easily be taken over in Eteocretan.

It is to be observed however that νόμος does not occur in the Gortyn tables; the phrase or 'these laws' being always τάδε τὰ γράμματα. (Roberts, *Epig.* p. 55). But at a date when the custom of writing down the law was being newly adopted, those laws which were written down may well have been called γράμματα in distinction from the older, unwritten νόμοι 'customs'.

(*b*) *φraisoi* in l. 2 looks like a Dat. or Loc.

Remembering that in Strabo (p. 478) **Πρᾶσος** like **Κνῶσσος** is feminine one's first impulse is to take the following *inai*, if that be the true reading, as an Adj. in agreement. It is less probable that the whole group is the Dat. of a derivative Adj. like ἡρωΐνη, *Iguvina* because there seems no preceding Subst. for it to qualify. If we guessed more wildly and equated it with Att. εἶναι, we could only do so at the cost of the assumption that I.-Eu. *esn-* became *īn-* in Eteocretan,—this assumption I see nothing to confirm. In Cretan Doric the Inf. ends in -μεν.

---

[1] The first change was probably to *ofs-*, then to *ohs-*, then *os-* merely. In Umbrian the change took place even in a *-ps-* which had arisen from contraction; but Oscan keeps this later *-ps-* (Osc. *opsaum*, '**operare, aedificare.*') On these changes generally see *It. Dial.* ii. p. 495, and more fully Von Planta, *Osk. Umbr. Gram.* i. § 207 f.

[2] But Pauli, *Ven.* p. 318, connects this and the masculine form *iiuvants* with Lat. *i(u)uentius*, a Gentile name common in Venetic areas, and this with *iuvenis*, etc. In either case the phonetic change would be the same (*-ntia* → *-ntsa*), but if Pauli's interpretation is preferred we must not call it a Participial ending. I am bound to add that Pauli derives *Iiuvantsa* from an imaginary **Iuventissa*; but for this he has absolutely no analogies to offer; nor do I think it can be made at all probable that such a form would have been contracted in Venetic.

(*c*) Unless *φraisona* in l. 6 be some ethnicon in *-on-* to which I know no parallel in Southern languages,[1] we must take *φraiso* as a Gen. or Abl. and *-na* as a Postposition closely akin to the Greek ἀνὰ and to *-ne* in Lat. *superne*, *pone* for *pos-ne*, *done-* in *done-que*, Umb. *perne* 'before'; also perhaps to Lith. *nů* (with Gen.) 'from,' Slav. *nā* (with Loc. and Acc.) 'in, to.' Both represent an earlier **nō*.

We should then be inclined to see the same form in the *prai-na* of l. 8, where we have already seen that a word ends.

*praina* might equally well be the Neut.-Pl. of a derived Adj. like Lat. *pronus*; in either case we might see in the preceding *-ma* the end of a contrasted Adj. like Osc. *posmo-* "postremus"; **posma* (or **poma*?) *praina* "in things behind and before, last and first," like the Umb. formula *pernaiaf postnaiaf* "before and behind" applied to omens, sacrifices, etc.

(*d*) If *φraiso* be Abl. or Gen., we shall attribute the same Case to *sardoφsano* (if that is how the word begins) in l. 3.

The word before it ends in *-tor*, which looks like a masc. Nom., perhaps of a proper name. If so, the following word might be the Gen. of the man's father's name.

I should like to read [*χ]*restopator*, or whatever was good Eteocretan for *χρηστοπατωρ, cf. Εὐπάτωρ, but the letter after *t* seems rather I or N than O.

If *-niator*, *-mator* or *-inator* be right we have some verbal Noun like *Victor*, *Salinator*, *domator*. Such forms are fairly common as names in Venetic; e g. *Lemetor*, *Eχetor* (Pauli *Veneter* No. 18 and 21); cf. also *Domator*, *Pletor* (*ib.* p. 261).

§ 33. It is time to consider the verbal forms in *t*, though in none of them can we be certain, on graphical grounds, that we have separated the whole word correctly. It is certain that one ends in *-gutat*; if we take *epimit* as another we get *-emet* as at least the ending of a third, *-nkalmit* and *agset* as those of a fourth and fifth (see §§ 27, 29 sup.), and *irereiet* as a sixth (§ 28). Finally *-animest* may either contain the Substantive Verb *est* or be compared with the Osc.-Umb. Fut. in *-est*. Then *epimit* might stand to *animest* as Osc. *sakruvit* to Osc. *sakrvist*, Lat. *redimit* to Osc. *pert-emest*. These are tottering erections, but they seem to support one another a little; (-)*agset* does look very much like a thematic Future or Conjunctive ἄξει or *ἄξῃ, *faxit*, Sanskr. *nē-ṣ̌at*(*i*), whether it be taken as a complete word or not.

---

[1] In Venetic it forms many derivative proper names, *Ermon-*, *Molon-* etc. Further north it is common; *Teutones* is of course a derivative of I.-Eu. *teu̯tā* Osc. *tovto* etc. "ciuitas." So Gallic *Redones* 'the charioteer-folk' (Glück, *Kelt. Namen bei Caesar*, p. 148). Pauli (*Ven.* p. 350) quotes also as Gallic the form *Vennones* beside *Vennum*, which would be a closer parallel, but he does not state where he found it, and I have not yet discovered the source.

(i) But the difference between the *x* of *barxe* and the *-gs-* of this form combines with the *-φt-* of *adoφte*, and *-φs-* of *-oφsano*, if, as we have conjectured, they stand for earlier *-pt-*, *-ps-*, to suggest that we had better not regard the *-gs-* as original (since by analogy we should expect orig. *-gs-* to become something like *-χs-* or *-hs-*, which might be denoted by Ξ); but rather as arising from a contraction; that is we shall take *-agset* for an earlier *-ageset*. Precisely the same syncope (of an unaccented syllable) is a marked feature of Osco-Umbrian (*e.g.* Osc. *factud* = Lat. *facito*) and of Venetic[1] (*e.g.* the name *Ermon-* derived from a stem *érĭmo-*,[2] Pauli *Veneter* p. 306, *Kástko-* beside *Casticius*, *ib.* p. 321). Hence if we count *-agset* a Verb, we shall compare its tense-stem rather with that of Lat. *tul-er-o* Gr. βαλ-έ-ω for *βαλ-εσ-ω. The Italic forms like Osc. *-emest* contain the same *-es-*. The difference between these with Eteocr. *-animest* on the one hand and *-agset* on the other would suggest that in this we have a long vowel in the termination, *-agsēt*, a Conjunctive like Old Lat. *forēt*, Osc. *fus*$\overset{e}{i}$*d* (where $\overset{e}{i}$ has come from *ē*). But if *animest* were read *-anim est*, so that *est* = Lat. *est* a non-thematic form, then the last syllable of *-agset* might be short.

(ii) Observe however that if we choose to regard *barxe* and *steφe* as Finite Verbs (? 3rd sing. of an unaugmented Aor. ?), we can only reconcile their ending with the forms in *-t* by assuming that it has lost the orig. *-t* or *-d* of Secondary Tenses and that the forms in *-t* if they are Singular, all belong to Primary Tenses. Rather than tie our hands so far, should we regard *barxe* as an Infinitive-instrumental? And *adoφte* as a Noun in the same case '(ad)optione, ἕκατι, uolens'? And *irere* likewise[3]?

(iii) It is an obvious conjecture to see in Eteocr. *b* the representative of an orig. *u̯* and connect *barxe*[4] with Gr. Ϝέργον, Ϝεργάζεσθαι, Ϝρέζειν (if that be from the same root); the meaning would be 'fecit' or 'facere.'

(iv) [*e*]*nkalmit* or [*a*]*nkalmit* might mean 'sets upon a column.' It so, the following *-ke* at the end of the line may well = Lat. *que* Gr. τε. This implies a serious phonetic assumption, on which see § 35. It also implies that *os* is a separate word.

(v) It is natural to connect *-emet* and *epimit* with Lat. (and Oscan) *emo*, 'I take'; but if the first word left to us in the *nomos-* insc. ends at *-onades*, not *-onadesi*, we must read the next as

---

[1] This statement so far as it concerns Accent in Venetic, I cannot fully justify here. Apart from its *a priori* probability, it rests upon what I regard as the direct evidence of the puncts which appear in the middle of words in Venetic script. These Pauli (pp. 191–213) has failed to interpret, but it is clear to me that they denote the word-accent; *e.g.* in *zona·s·to* (= Gr. *ἐ-δω-νήσετο, cf. Lat. *donā́ret*) the accent is on the second syllable. Accent is denoted in a similar way, by a mark before and a mark after the accented sounds, in the Pada-text of the Ṛig-Veda. The commonest practice in Venetic seems to be to place a dot on either side of the last consonant of the accented syllable; but until the text of the Venetic inscc. is put upon a sounder basis (a task I hope to attempt) the theory cannot be properly tested.

[2] Spelt *eriimo-*, where the *ii-* denotes the same 'open *-ĭ-*' as in the common terminations *-iia -iios* (cf. the Latin spelling *filea*) where the second *-i-* originally denoted merely the 'glide'-consonant (*-i̯-*) between the vowel *-i-* and the next vowel. But it was from this, I now believe, that the symbol || came to be used for *e* over a large part of Italy; see *Ital. Dial.* ii. p. 467.

[3] If there were more traces of religious formulae in the insc. one would guess that *irere irereiet* was part of a prayer 'auctu augeatur' (or 'augeantur') or the like; cf. 'with blessing I will bless thee' etc.

[4] It is well to observe that Gr. ἄρχω Skt. *arhati* has lost no initial sound.

*iemet*, which reminds one of Skt. *yamati* (he controls), connected with Gr. ἡνία for *i̯ēmi̯ā*. From either of these *epimit* might be a compound ; in the second case we should suppose the *i* before the *m* to be long. The meaning of the simple verb might differ from the compound in some such way as 'buys and holds,' 'controls and occupies.' (If *arala* in the next line is a separate word, one is tempted to see in it a derivative of *ara-*(*re*) meaning 'arable lands'; the suffix *-lo-* has a quasi-participial force in Italic, *e.g.* in Lat. *pendulus*, *bibulus*.

(vi) But then what are we to do with *sφa*? Is it akin to Gr. σφε, the object of *epimit* and the Antecedent of some Relative which was the object of the preceding *-emet*? Or shall we take a wilder leap and identify it (*ignotum cum ignotiore*) with the mysterious σϜα on the more or less Oscan insc. of Anzi (*Ital. Dial.* 22), where, if it is a complete word, it must mean "and" or "or." The Zend *aspa-*=Sansk. *ašva-* would lend us a decent pretext for supposing a change of *-sv-* to *-sp-* and the I.-Eu. Adv. **su̯ă* (=Germ. and Eng. *so*) might easily have come to have that meaning (which indeed *so*, and the Adv. *similarly*, often approach in English), cf. Lat. *item* ; the change of meaning in Lat. *et* beside Gr. ἔτι, Skt. *ati* is not very dissimilar.

(vii) The second *r* in *-arkrkokle-* is syllabic whether it ends a word or not. If the former hypothesis were rendered likely by any fresh evidence, *Meumarkr* would suggest the Greek compounds of -αρκης (ποδαρκής) and in its suffix Lat. *-acer*, N. Osc. *-pacr* 'propitius.' It might be a name like *Strongbow*, *Greathurst*.

§ 34. There are one or two more forms whose fate in our eyes, on the I.-Eu. hypothesis, depends upon the view we take of the Eteocretan treatment of final *-m*, and of orig. *-ō*. Did *-m* remain as in Sanskrit, Zend and Italic? Or did it become *-n*, as in Greek and Venetic and Phrygian?[1] Did *-ō-* remain or become *-ū-* as in Osc.-Umb., Venetic, Boeotian, and Thessalian[2]? With this is more or less connected the vitally important questions of the treatment of the Velars and Palatals, and of the Aspirates. On all these points, unhappily, there is little that can be called evidence, save perhaps as to final *-m* and the Palatals.

(i) Having recognised a Partc. Fem. in *-tsa*, it is tempting to see in *asegun Anait*, or *segun Anait* the Partc. Masc. of a Verb, simple or compound, =Gr. σέβων (Sanskr. *tyaj-*, I.-Eu. *ti̯eʓ*-, as is commonly assumed ; the "root" in any case ending in velar ʓ). But it is impossible to be certain that *Anait* is a separate word, and of course one would not expect to find the name with no suffix. The Greek form (in literature) is Ἀνάϊτις. But a foreign deity may dispense with terminations (cf. the Arabian Ἀλίλατ in Herodotus I. 131) especially if he or she be only newly introduced ; what Case shall we assign to Lat. *Pol*, *ecastor*, *hercle?*

(ii) Is *steφe* a form ending like *barxe* and *irere*, and *siamun* a place or river connected with the Promontory Σαμώνιον, which seems a derivative from a stem σαμων- (? earlier Eteocr. *si̯amōn-*)?

(iii) Then we may separate *epalun* from the following *gutat* and boldly identify *alun* with Gr. ἄλλων, representing an earlier *ali̯ōm*. If we took further any one of various obvious guesses which would give a meaning of "gives to taste, gives tithe of" (γεύ-(σ)-ώ, Lat. *gu-s-tus*, *gustare*), "drops, pours, offers" (Lat. *gutta, or* Lat. *fundo futtilis*, Gr. χεῦ-σαι), or even "dedicates, vows" (Lat. *uouēre*, *uōlare*) we could extract a somewhat indifferent sense "[whatever she] shall recover," (or "[whatever the land] shall give back), [the city] vows in addition to other things," giving *ep* with the Gen. in Eteocretan the meaning it has with the Dat. in Greek. This last assumption might pass in view of the capricious way in which the I.-Eu. Prepns. choose different cases in the same meaning in closely related dialects (*e.g.* Osc. *op eizois* "before their court" closely = Lat. *ob illos* and still more closely = Gr. ἐπ' ἐκείνων "before their eyes, in their time"). But the rest of this guess work would plunge us into phonetic toils which at least we must set clearly before us, so that if they are mere snares, they may be cut as soon as ever sufficiently decisive evidence is found.

---

[1] See *e.g.* Pauli, *Veneter*, p. 403. For *ō* → *ū* see *ib.* p. 401. For the Phrygian inscc. see Ramsay, *Journ. R. Asiatic Soc.* 1883 (xv) p. 128 ff. ; and *Kuhn's Ztschr.* 1887 (xxviii) p. 387 ff. Final *-m* does not occur and forms like κακουν, *mataran* are unmistakeable Accusatives.

[2] And almost certainly Phrygian, where ου (εἶτου 'ἔστω' γλουρος 'gold' = χλωρὸς) seems to correspond to Greek ω ; cf. Kretschmer p. 224.

§ 35. If I.-Eu. *-m* became *-n* in Eteocretan we shall resist temptation to equate *desiem*, in l. 1 with Lat. *decem*. And we shall not be sorely tempted, because *-askes-* in l. 11, however many bits of words it may contain, combined with *-agset* and the very frequent *k* of the *barxe-* fragment (which can hardly be all = I.-Eu. *q*), to render it unlikely that *k* was palatalised. In other words such evidence as there is inclines us to exclude Eteocretan from the *satem*-group of languages. Venetic is similarly excluded, by a multitude of words beginning with or containing *k* (or *c* in Lat. alphabet), e.g. *katus*, *katakno*, *Turkna*, though its congener Illyrian had palatalised *k* by the 16th. century A.D. (Brugmann *Grundriss* I$^2$ § 623). Kretschmer (*Einl. in d. Gesch. d. Griech. Spr.* p. 266 ff.) comes to the same conclusion as to Venetic, though he mentions only a small part of the evidence. And we are still left to ask, after all that has been written on the question,[1] whether there is any reason for not counting Phrygian also a *centum*-language. Into this lively controversy I am not prepared to enter until more ample evidence is found. But I am bound to make two negative remarks: there is no substantial ground for asserting that I.-Eu. *k̄* became palatalised in Phrygian under any circumstances; and, if it did, no satisfactory explanation of Phryg. αδδακετ (which = Lat. *ad* + *facit*, (cf. Gr. -θηκ-) seems to me to have yet been offered.

If *-ō-* before a consonant became *-ū-* in Eteocretan we must either suppose the change took place after the loss of final *-d*, or regard *φraiso* and *Sardoφsano* as Genitives, or else, which seems simpler, we may suppose that the change took place only before (final?) *-m* or *-n*; in Latin it took place before final *-m*, or *-n-* followed by certain Consonants (*e.g.* Gen. Pl. *-ūm*, and *homūnculus*, etc.)

---

[1] See Kretschmer *op. cit.* p. 230 and the multitude of divergent writings he cites. He himself quotes as many exceptions to, as examples of, his own view. The solitary example alleged of Phryg. *s* = I.-Eu. *k* is the Pronoun (dat.) σεμου(ν) 'τούτῳ' which is equated with the O. C. Sl. dat. *semu* 'τούτῳ,' and taken to come from I.-Eu. **k̄i-*. Both forms contain the pronominal affix *-smo-*, but the Phrygian σε- (fem. σα 'ταύτῃ') may, in the present state of our knowledge, just as well contain I.-Eu. *ki̯o-*, *khi̯o- si̯o-* or *ti̯o*, or even *so-* (like Lat. *ipsum* and Osc. *ekso-*) as I.-Eu. *ki-*; all these pronominal roots occur in different languages (Brugmann, *Grundriss* II. § 409). Even in the second syllable the identity of the Phryg. and O. C. Sl. forms is not certain, see Solmsen, *Kuhn's Zeitschr.* 34 (1897) p. 50 (he accepts the current view of the first syllable).

As to the various equations I have conjectured for *gutat*, now that we are moderately happy about the palatals, the first may be maintained at no more cost than supposing a derivative of the root *geu̯s-* without the "Determinative" *-s-*; and that is really a very slight cost indeed. Into the phonetic assumptions involved in the others I am not prepared to drag the reader until I see some independent reason for thinking any one of them probable.

§ 36. If we were right in treating the *g* of *segun* as representing an original Velar ℨ before an orig. *ō*, and the *ke* after *nkalmit* as *-que*. this would mean that in Eteocretan the Velars were not labialised. Now in a *centum-* language this conclusion would have a novel and most startling importance. It would place the language in this respect on a more primitive stratum of I.-Eu. speech than any language yet known. For such a conclusion it would be foolish to think that we had at present adequate evidence. Further inscc. may prove that Eteocretan belongs to the *satem-* group by giving us examples of I.-Eu. *k̑* changed into a sibilant. At present we have not succeeded in identifying any such cases, and the other phonetic characteristics we have noted show European rather than Asiatic affinities.

There is however one curious circumstance to increase the eagerness with which we look forward to further discovery. Precisely the same doubt hangs over the treatment of the I.-Eu. gutturals elsewhere. In Phrygian, Velars were certainly unlabialised (*e.g.* Γέρμη 'Hot-well,' parallel to Gr. *θέρμαι*, I.-Eu. *ℨ*hermā-*)[1] and as we have seen it is not yet proved that the Palatal *k̑* did not remain an explosive. And there is another scantily recorded language in which the preservation of Velars unlabialised and Palatals unpalatalised side by side, must, I believe, be recognised as far the most probable explanation of even the evidence which we at present possess. This is Venetic. We have seen already that orig. *k̑* is preserved in Venetic with no trace of palatalisation. But I have made a special search through all the records[2] of the dialect and found no trace of any Indo-European *q* becoming either *qu* (or *kv*) or *p*[1]; but, on the other hand, some positive evidence to show that the Velars were treated in Venetic as simple gutturals.

---

[1] Kretschmer *op. cit.* p. 231. There is no doubt that I.-Eu. palatal *-ĝh-* became a spirant, but so it did in some of the *centum* languages.

[2] Very fully collected in Pauli's *Veneter*; they include over 300 inscc. in the Venetic alphabet (which we may note has no *q*), about a score of glosses and place-names, some 200 Personal names, with another 400 or 500 from Pannonia and Illyria where a speech akin to Venetic was certainly spoken.

The Venetic name *Ecco* side by side with the Gallic *Eppo* (in the Roman colony Aquileia, *C.I.L.* iii. 3796, the latter person is described as *Boius*, *ib.* 3816), both derivatives of the word which in Latin is *equos.*[2] And the Venetic names Χ*al*χ*na* (*i.e. Galgna*[3]) and *Galgestes* have been attractively connected by Kretschmer (*op. cit.* p. 267) with Lith. *žalga* 'pole' Goth. *galga* (Eng. *gallows*), a natural nickname for a tall person (the cognomen *Galba* looks like a Gallic form of the same). If this derivation be correct we have Ven. *galg-* = I.-Eu. *ĝhalgu̯-h-*, a Velar aspirate becoming simply *-g-*, not *-gu-* nor *-v-*.

None of the forms that occur have reminded us of the distinction between the 'Pure Velars' and 'Labiovelars,' now generally recognised (see Brugmann, *Grundriss* I$^2$ § 630 ff.). But it is a tiresome factor in the problem which makes it unwise to accept any conclusions as to the treatment of the gutturals in a particular language until they are based on a fairly solid number of examples. But Lat. *que* Gr. σέβειν of course contain Labiovelars, not 'Pure Velars.'

It is quite pitiable to have to depend on so much merely negative evidence in a point of such interest. *A priori* it is likely enough that there should be a middle neutral zone, between the Labialising and Palatalising groups, and until it is clear that Venetic and Eteocretan do not represent such a zone—though any day may bring such evidence as to Eteocretan—their scanty remains will be the centre of peculiar and affectionate interest to all students of the Indo-European languages.

§ 37. It will be convenient to gather together in tabular form the chief (and more certain) phonetic and morphological characteristics of Eteocretan, and to compare it in these respects with the languages which it appears to resemble most. In considering the table, however, it will be prudent to bear in mind that further discovery may enable us to add many more items to our first column, and that in such additional points the relation of Eteocretan to the other languages may wear a very different appearance.

---

[1] There are two apparent exceptions of the kind which prove the rule; *Liquentia* the river and emporium of the Latin Colony Concordia; *Quasauna C.I.L.* v. 3463, with a characteristic Gallic suffix, the wife of a man from Aesium, in the *ager Gallicus.*

[2] Of course this contains I.-Eu. *-k̄u̯-*, not I.-Eu *q*. But if Venetic delabialised a full *-u̯-*, it must surely have corrected the tendency of *q* to become *qu̯*.

[3] χ denotes *g* or something like it; *e.g.* Ven. *E*χ*etor* gives a derivative *Egtoreus* in Latin alphabet. There are no signs for the Mediae in the Ven. alphabet; *Boius* is written φ*ohiios*.

| ETEOCRETAN | GREEK | PHRYGIAN | VENETIC | OSCAN | LATIN |
|---|---|---|---|---|---|
| 1 Preservation of five I.-Eu. vowels | Yes | Yes | Yes | Yes | Yes |
| 2 *ai*, *oi* preserved | Yes | Yes | Yes | Yes | Yes (in part) |
| 3 Change of *ei*? | In part (to *ē*) | No? | Yes | No | Yes (to *ī*) |
| 4 Change of *ōn* to *ūn* | Yes, in Aeolic | Yes | Yes | Yes | Conditionally |
| 5 Preservation of *s* between vowels | No | Yes? | Yes | Yes | No |
| 6 Change of *p* (and *k*?) to spirants before *t* and *s* | No | No (*Ϝανακτει*) | Yes[1] | Yes[1] | No |
| 7 Final *-t* | No | Yes | ? | Yes | Yes |
| but final *-st* | No | No (*egaes*) | Yes | Yes | Yes |
| 8 Diphthong *eu*? | Yes | ? | Yes, (Illyrian, *Breuci*) | No | No |
| 9 Change of *-m* to *-n* | Yes | Yes | Yes | No | No |
| 10 Velars unlabialised? | No | Yes | Yes | No | No |
| 11 Palatals preserved as explosives? | Yes | ? | Yes | Yes | Yes |
| 12 Fem.-Partc. in *-tsa*? | Partc. in -(ν)σα | Adj. in *-ssa* | Yes | No | No |

§ 38. If the steps[2] which led us to think the endings in *σμίνθος*, *λαβύρινθος*, etc., to be Phrygo-Cretan be confirmed, few conclusions could be more important ethnologically. The origin of the old stratum of Greek names in *-νθος*[3] has been long a riddle; Kretschmer concluded that they belonged to the 'Urbevölkerung' of the Peloponnese: but that this was non-Indo-European. For the second of these inferences I have never been able to see any ground; but the first is clear, and Kretschmer's (*Einl. in d. Gesch. d. Griech. Spr.* p. 402) collection of the forms is most valuable. Have we not here fair evidence that the pre-Achaean language of the Peloponnese, not to say the Aegean, had at least one feature in common with that spoken round Praesos? Kretschmer cites names with this ending, or the kindred *-ανθος*, *-ονθος*, or the corresponding feminines, from the Peloponnese,—*Κόρινθος* (cf. *Τιρυνθ-*), and others in the Aegean (*Λέβινθος*, *Πρεπέσινθος*—where note the intervocalic -*σ*-), in Euboea, Attica, Aetolia (*'Αράκυνθος*, and add the island *Ζάκυνθος*); and in several names in Thrace —which is significant in view of the close connexions between Thracian and Phrygian. He compares further the -*unt*- of the Illyrian *Salluntini*, the Messapian *Sallentini* with the Agraean king *Σαλύνθιος* (Thuc. 3. 111. 114; 4. 77); and the Bruttian *Κόκυνθος*.[1] Now Messapian and Illyrian are clearly related to Venetic, a language to which we have found certain resemblances in Eteocretan.

---

[1] Some possible limitations have been mentioned above.

[2] §§ 22 and 31 (f.). Briefly they are: σμωρ, σμίνθος, (Σμισίων),—*Chrysa*, Σμινθεύς Χρύση,—Λαβύρινθος Ῥαβίνθιος,—Ἴδα Πέργαμον,—Κίσαμος.

[3] Words containing the root of ἄνθος, Skt. *anahas*, must of course be put on one side.

But Kretschmer's evidence is more than merely geographic. The collection which he has made of Greek words showing these -*νθ*- suffixes bears a very clearly marked, and highly significant character. They are all earthy of the soil; they represent exactly the type of words which come into language from the speech of the countryman, *ascriptus glebae*. Just as the Romans called the cow by a Volscian word (*bos*), and the dung-heap by a Sabine word (*oletum*),[2] so did the Achaean warriors learn from their Mycenaean servants and tenants the names for *βόλυνθος* 'dung,' *πείρινθ-* 'the basket-car of the wagon,' *κήρινθος* 'bee-bread,' *ὄλυνθος* 'unripe fig,'—whence Philip's victims the Thracian Olynthians were named—*ἕλμινθ-* 'intestinal worm,' *ἐρέβινθος*, *λέβινθος* common kinds of pea, *ἀσάμινθος*[3] 'bath-tub,'—very different from an Athenian *βαλανεῖον*,—*τερέβινθος*, 'the (southern)[4] turpentine-tree,' *ἀψίνθιον* 'wormwood,' *κορυνθεύς* '*κόφινος, κάλαθος, ἀλεκτρύων*' (Hesych.), *κόρυνθος* '*μάζης ψωμός*' (*id.*), *αἴγινθος* a bird, and finally the Epic adverb *μίνυνθα*,—just the kind of colloquial particle to find its way into a competing language, like the colloquial Saxon *bit* beside the polite Norman French *morsel*, both meaning exactly the same, 'a bitten fragment,' or, as the Mycenaeans[5] called it, *κόρυνθος* (no doubt from *κείρω*, 'I cut'). *Σμίνθος* 'mouse' belongs to the same category,[6] and *ὑάκινθος* 'the flower of spring' must go with them. Finally, I am bound to point out that Kretschmer's proof (*op. cit.* 293 ff.) of the identity of the Greek *-νθ-* with the *-νδ-* of place names in Caria and Asia Minor generally (*'Αλάβανδα*, and the Carian *Λαβραῦνδος*), lends further importance to our present hypothesis.[1] The transcription of the fragments of Carian preserved is too uncertain to help us; but Georg Meyer's long collection of the Carian place-names (*Bezz. Beitr.* x. p. 157), appears to me, as to Meyer himself, (though not to Kretschmer, p. 377), to be perfectly consistent with the ascription of the language to the Indo-European group.[2]

---

[1] On Iapygians, Bruttians and Pelasgians see *Ital. Dial.* 25 A. Rem. p. 15.

[2] See *Ital. Dial.* pp. 359 ff.

[3] Note here again the -*σ*- between vowels.

[4] 'Pistacia Terebinthus, a Mediterranean tree, yields by incision the Chio or Cyprus turpentine.' Le Maout et Decaisne, *General System of Botany* [Trans. Hooker] s.v. *Terebinthaceae*, a reference I owe to my colleague Mr. H. Spencer Harrison, D. Sc.

[5] I use this term rather than Pelasgian only because the Pelasgian question is strictly irrelevant to the matters discussed in this article.

[6] If it is an I.-Eu. word the root might be that of Gr. *σμάω*, Eng. *smear* (*smai̯*- or *smei̯*-).

It is clearly impossible to examine here the wide deductions suggested by the coincidences we have noticed. But our efforts to discover further monuments of the Eteocretan language will at least be quickened by the hope that with such discovery may come a fuller answer to two interesting questions, Was an Indo-European language spoken in Asia Minor and in the Mediterranean basin in the Minoan age? And if so, were its speakers the race that developed the civilisation enshrined for us in the monuments of Mycenae?

R. S. CONWAY.

CARDIFF, *Jan.* 9, 1903.

---

[1] The name Σμινδυρίδης, which must be connected with Σμινθεύς, occurs at the Achaean colony Sybaris, Herodt. 6. 127.

[2] The only group of sounds which could be cited as non-Indo-European is initial *kb-*, which is fairly frequent, *e.g.* in Κβονδίασσις. But the combination is not merely non-Indo-European but non-human, *i.e.* utterly unpronounceable, unless either a vowel is understood after (or before) the *k*, or, which is clearly the right alternative, the β be taken to denote here, as it does in so many other places, nothing more solid than a consonantal *u̯*, or the spirant *v*. I know nothing about Lycian; but so far as Kretschmer's arguments as to this language rest on the groups *kb-*, *tb-*, they are certainly misleading.

# KEFTIU AND THE PEOPLES OF THE SEA.

## I.—EARLY RELATIONS BETWEEN EGYPT AND GREECE.

IT may well be that in the idea of Herodotus and his contemporaries, that the gods of Greece came originally from Egypt, there lies a consciousness of a fact, and that there was latent in the Greek mind a vague idea that their civilization had, far back in the mists of time, come into contact with that of Egypt, and even that some of its characteristics were of Egyptian origin. Leaving out of account the question of the possible African origin of 'Mycenaean' culture, and so ultimately of much of the civilization which we know as 'Greek,' we can now say with certainty that we know that Greek culture had, a thousand years before Herodotus, been brought into contact with the already three thousand year old civilization of Egypt, and that this contact was a comparatively close one, and one which cannot fail to have resulted in a perceptible modification of the less-developed and younger culture. We now know that this contact was closest in the sixteenth and fifteenth centuries B.C., when the kings of the XVIIIth Dynasty reigned over Egypt.[1]

As to the routes by which this connection was first established and afterwards carried on, opinions may differ. I have myself expressed certain views on the subject which have been the subject of some criticism, but I confess that although I see that I unduly minimized the possibility of direct communication between Greece (*sc.* Crete) and Egypt at this period, yet I am not prepared to wholly abandon my view that the long and circuitous route *viâ* Cyprus and the Palestinian coast was that originally taken and afterwards more or less maintained. We know that the fleet of the confederated Mediterranean tribes which attacked Egypt in the reign of Rameses III. (*circa* 1200 B.C.) actually did take the longer route and was defeated off the Palestinian coast. Similarly, the expedition of the Athenians took the longer route to Sicily. A large fleet, encumbered with convoy, might well in both cases take the longer way when single ships would directly cross the open sea, but the probability remains that the longer and safer route was the original one by which connection was first established, and that it was not until the approximate position of either Egypt or Sicily was well known that the direct route could be first dared, then used with certainty of arriving at the goal.

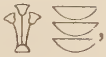
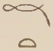
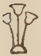
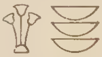
---

[1] The date of the XVIIIth Dynasty has finally been proved by Dr. Budge in a concise and convincing argument on pp. 153–156 of the first volume of his new *History of Egypt;* Amenophis III. began to reign not later than 1450, and Amenophis IV. (Khu-en-Åten or Åkhu-n-Åten) ceased to reign not later than 1400 B.C. These dates are based, not on mere calculations of the reigns of Egyptian kings, but on a synchronism with Assyrian and Babylonian kings whose dates are known from the cuneiform records, and, further, this Babylonian evidence agrees in every point with the Egyptian evidence on the subject.

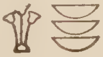
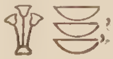
I have assumed that these Mediterranean confederates of Rameses III.'s time came from Greece, or thereabouts. The correct determination of who these 'Peoples of the Sea' and their predecessors, the men of *Keftiu* and the *Ḥa-nebu*, were and where they came from, is so important a matter that it would seem advisable to put together anew some notes upon the subject which may tend to make the connection of these 'Peoples of the Sea' with matters Mycenaean clearer to those who are still doubtful on the point.

The Egyptian monuments of the sixteenth to the twelfth centuries B.C. chronicle relations which existed during the period contemporary with the Mycenaean Age in Greece between the Egyptians and various peoples of the Mediterranean, who are distinguished from the Semites of Palestine and Syria. Non-Semites of the Eastern Mediterranean who came into close contact with Egypt during the period when Mycenaean wares were regularly exported thither come very near being Mycenaeans themselves. And as a matter of fact we find some of them actually depicted by the Egyptians as wearing Mycenaean costume and bringing Mycenaean vases with them to Egypt as gifts to Pharaoh.

## II.—The Ḥa-nebu.

A constantly recurring general appellation for the inhabitants of the 'Lands of the Very Green Sea' under the New Kingdom was , *Ḥa-nebu*, a corrupt phrase which at least as early as the XVIIIth Dynasty meant to the Egyptians 'All the Northerners,' and when, as was sometimes the case, the word  *Meḥt*, meaning 'North,' was substituted for *Ḥa*, , the meaning could no longer be doubtful to any reader. From this time onwards the phrase meant 'All the Northerners,' and in Saite and Ptolemaic days this meant definitely Greeks, and nothing but Greeks. The word Ἕλληνες is translated  in Ptolemaic inscriptions, and in the sixth century inscription recording the battle of Momemphis (Hdt. ii. 163, 169) the Ionian auxiliaries of Amasis are called Ḥau-nebu.[1]

Mr. W. M. Müller has made an investigation into the origin and history of the word,[2] which I have supplemented with some additional matter.[3] It appears that although under the XVIIIth Dynasty the word meant 'All the Northerners,' and referred to the Mediterraneans, its original signification was something quite different, for the original form of the name was simply *Ḥaàu*, which means 'Fenmen' of the Delta, those who dwelt in the papyrus-swamps of the North, foreigners to whom it was expressly forbidden to communicate any of the magical protective formulæ of the Book of the Dead, thus definitely marking them off as outside the pale. Originally then the Ḥa-nebu were neither Greeks nor Northern Mediterraneans of any kind.

But the corrupt form  is found as early as the VIth Dynasty. Whether this was already read *Ḥa-nebu*, and meant 'All the Northerners,' or retained the proper value *Ḥaàu*, 'Fenmen,' is uncertain: I think the latter was probably the case, and that at this period the word meant no more than the Delta-people, so that when Pepi I. is described in his 'Pyramid-Texts' as 'circling in the circle of the ,' this was read *Ḥaàu*, and the idea was that the ghost in the course of his peregrinations would wander among the barbarians of the swamps and sands of the Mediterranean coast. The 'circle' (*debn*) can, in the absence of convincing archaeological proof of any connection between Egypt and the Northerners at this early period,[1] hardly be taken to mean as yet the circling round of the land from Egypt *viâ* Palestine and Phoenicia to Asia Minor, though the name for the north Syrian coast, *Kedi* (*Kode*), certainly meant part of this in later times,[2] and under the XVIIIth Dynasty the basin of the Eastern Mediterranean, the north-western world of the Egyptians, going *viâ* Syria to Asia Minor and Crete and so back by Libya, was known as the 'Great Ring,' *shen uer*.[3]

---

[1] Daressy, *Recueil*, xxii.; *Oldest Civilization*, p. 323.

[2] *Asien u. Europa*, p. 24 ff.

[3] *Oldest Civilization of Greece*, p. 159 f.

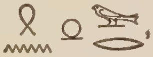
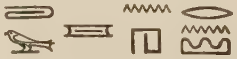
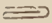
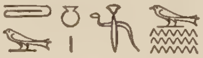
We thus find no certain reference to the populations of Asia Minor and Greece under the Old Kingdom. But under the Middle Kingdom, though the original meaning was 'Delta-people,' it is probable, seeing that some kind of connection between Crete and Egypt seems to have been already established, that the word *Ḥa-nebu* had now begun to acquire the meaning which it certainly bore under the XVIIIth Dynasty,—Northerners of Southern Asia Minor and Greece,—and that the 'Circle' had already been projected forward into the north-western lands.

At this period a certain idea of a supernatural character was attached to the Ḥa-nebu, for they are spoken of in poetical antithesis to mortal men. The conception bears some analogy to the Chinese idea of the *Fan-kwei* or 'Ocean Spirit,' nowadays generally translated as 'Foreign Devil.' The Egyptian idea of the Ḥa-nebu or Meḥt-nebu seems to have been almost equally uncomplimentary; and they are referred to in the Book of the Dead as raiders and spoilers, from whom the god Thoth was

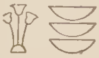
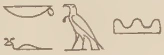
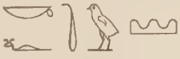
---

[1] Prof. Petrie's discoveries of 'Aegean' pottery in tombs of the First Dynasty at Abydos still remain difficult to explain, since the evidence from Crete seems to point to a contemporaneity of the primitive 'Amorgian' period with the Egyptian Middle Kingdom.

[2] Müller thinks this word originally meant the 'Circle' of the Gulf of Issos (*op. cit.*, p. 248), and to judge from the way in which it is mentioned in the inscription of Rameses III. describing the march of the Pulesatha and their confederates against Egypt (v. *post*, p. 183) this seems a very probable explanation.

[3] , so distinguished from the *pekher uer Naharen*, , 'Great Encircling Water of Mesopotamia,' *i.e.* the encircling waters of the Euphrates and Tigris. The  of the sentence , quoted by Müller, *op. cit.*, p. 253, n. 3, must be emended to , 'the Great Ring of the Great Green Sea,' for the waters of the Eastern Mediterranean do not *en*circle anything, as those of the Euphrates and Tigris do, but *are enclosed* in the Great Ring of Palestine, Asia Minor, Crete, and Libya.

prayed to deliver his worshippers, and the personification of *Rest*, Ḥetp, to grant respite.

Under the XVIIIth Dynasty the word , now certainly read *Ḥa-nebu*, and translated 'All the Northerners,' can no longer have meant the *Ḥaȧu* or Fenmen of the Delta, who had ceased to exist as a separate people,[1] but the nations of the Great Green Sea, the Mediterranean, in general, with the exception of the Palestinians and Syrians: the phrase was never used and never had been used to designate them. It might have been expected that with the disappearance of the swamp-people the corrupted name 'All the Northerners' would have been transferred to the Semites of Palestine, who had always typified the Northlanders for the Egyptians; but it is really quite natural that the mysterious Mediterranean tribes, already known under the Middle Kingdom as raiders of the Delta, should have succeeded to the name rather than the Semites, whose tribal appellations were well known. But, although the Mediterraneans were called Ḥa-nebu, and in the reign of Merenptah the sea-peoples are directly described as *Meḥti*, 'Northerners,' yet the 'Isles in the midst of the Great Green Sea,' the 'Ends of the Lands of the Great Circle,' from which they and their côngeners came, were always regarded by the Egyptians as belonging to the *West*, and the next people mentioned under the XVIIIth Dynasty as coming from the Isles was regarded as typical of the West just as the Semitic nations were regarded as typical of the North. Thus to the Egyptians these Mediterraneans were Northerners who came from the Isles of the West; *i.e.* their home lay *north-west* of Egypt. The name of this definitely Western people meets us for the first time under the XVIIIth Dynasty: the men of the land of *Keftiu* [2] or *Kefthiu* , a term used on the monuments, sometimes interchangeably with *Ḥa-nebu*,[1] to represent the Peoples of the North-West, but in a less vague manner than *Ḥa-nebu.* It ceased, however, to be used as early as the time of the XIXth Dynasty; the word Ḥa-nebu survived it and was used in a more or less correct sense in the Saite and Ptolemaic periods, when *Keftiu* was revived in a way which shews us that its real meaning had been long forgotten.

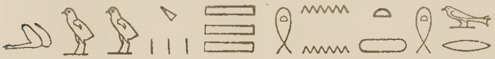
---

[1] We have no proof of the existence under the New Empire of any inhabitants of the Delta other than the Egyptians themselves, some Semites in the direction of the Wadi Tûmilât and the Isthmus (the Israelites, for example), and the Libyans, whose encroachments on the Delta had become very noticeable in Merenptah's time. I am therefore unable to accept the theory, erroneously ascribed to me by Mr. Cecil Torr (*Class. Rev.* xvi. p. 183), that 'the name *Haunebu* . . . was always applied to the inhabitants of the Delta; so that, when the Hellenes settled in the Delta, the term came to be applied to them.'

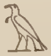
[2] As it stands, this is the name of a *land*, not of a people. Prof. Maspero prefers to use the form *Keftiu* (*Kefâtiou*) for the people, the land being, according to him, properly *Kefti*. This may be so, and the derivation of an ethnic *Keftiu* from the land-name *Kefti* is very probable, but

The especial interest of the name *Keftiu* lies in the fact that whereas we have no representations of any Ḥa-nebu, the men of Keftiu are often represented by the Egyptians of the XVIIIth Dynasty, and, to judge from their appearance, costume, and tribute, they were not only Mycenaeans, but specifically Cretan Mycenaeans. The term *Keftiu* however probably included other Mycenaean lands besides Crete.

## III.—Keftiu.

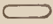
The word *Keftiu*, like *Ḥa-nebu*, is Egyptian, being the same as the expression *ḳefti*, signifying 'At the back of,' or 'Behind'; *i.e.* the land Keftiu was the 'Hinterland,' the 'Back of Beyond,' to the Egyptians. The lands of the Back of Beyond were assigned to the countries of the *shen uer*, the 'Great Ring' of the Eastern Mediterranean, already referred to. In the 'Hymn of Amen,' a poetical composition in honour of Thothmes III., we find the king given power to smite the peoples who dwell in , *Keftiuu*(?),[2] *tau shenenet, shenet uer*, 'the Keftius (*i.e.* Hinder Lands), the Lands of the Ring,[3] the Great Ring.' In the next sentence the antithesis to the Hinder Lands is given by the mention of the people of the Fore Lands, or countries immediately in front of Egypt, the *Ḥeru-shau*, 'Those who are upon the Sands,' the Bedawin of the eastern frontier. So Keftiu lay in the extreme aphelion, so to speak, of the orbit of the peoples which revolved around the central sun

---

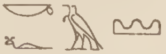
we have no instance of the form *Kefti* unless we read the sign  as *ti*, and not as *tiu*. Probably Prof. Maspero reads it *ti*: I, in consonance with an equally well-grounded opinion, read it *tiu*, and in presence of the variant spelling Kefthi*u*, which is as certainly that of the land and not of the people, I am inclined to retain the reading *Keftiu* for the land. The people may very well have been called 'Keftiu' also, but to avoid confusion, I have generally spoken of them as 'Keftians' or 'men of Keftiu.'

[1] *E.g.* in a list of the Nine Barbarian Nations (Brugsch, *Geographische Inschriften*, ii. p. 88).

[2] I propose to read here *keftiuu*, not the ordinary *peḥuu* (*v.* Brugsch, *Wörterbuch*, p. 1493).

[3] Determined by the sign , 'island.'

of Egypt, in the remotest part of the Mediterranean Ring. South-western Asia Minor, Rhodes, and Crete are not indistinctly indicated, and the specific identification with the latter was proposed by Brugsch as long ago as 1858.[1]

Further, as has been said, the land of Keftiu is definitely assigned to the *West.* The 'Hymn of Amen' in another passage mentions Keftiu, phonetically spelt out this time as , with *Àsy*, a land to which we shall again refer, as 'lands of the West.' In the tombs of Puamrā (*temp.* Hatshepsut) and Rekhmàrā (*temp.* Thothmes III.), at Thebes the typical nations of the four quarters of the world are depicted: first comes the East, represented by the Punite of Somaliland, then the South, represented by a negro, then the West, by the European-visaged, Mycenaean-clothed man of Keftiu, finally the North, by a typical Semite.[2] We see the same arrangement in other Theban tombs of this period. Palestine, Phoenicia, and Syria, the lands of Tchahi (Zahi), Kedi, Kharu, Upper Rethnu and Lower Rethnu, Naharen, Amar, &c., the lands of the Semites, that is, were always typical of the North, and the Negroes of the South; Punt of the South-East could often do duty for the East, and either the Libyan of the South-West or the Mycenaean of the North-west could personify the West. There seems then no doubt as to the geographical position of Keftiu, which (1) = the isles of the Mediterranean, and (2) lay north-westward of Egypt, at the furthest end of the 'Great Ring.'

There seems no doubt, but, unluckily, in Ptolemaic times *Keftiu* was used to translate the Greek word Φοινικη: *i.e.* the Ptolemaic Egyptians thought *Keftiu* was Phoenicia. Hence the natural conclusion was drawn and generally maintained until a few years ago that the *Keftiu* of the XVIIIth Dynasty was also Phoenicia, and that the description of it as a Western land was a gross piece of carelessness on the part of Thothmes III.'s poet. But this theory always had great difficulties to contend with. (i) Why Phoenicia should be assigned to the West in the XVIIIth Dynasty tombs while the rest of the Semites were all regarded as representative of the North was never explained[1]: to get to Phoenicia, an Egyptian would go North-East. In the tombs of Puamrā, Rekhmârā, and others, where tribute is represented as being brought by representatives of the Quarters of the World, the Keftian is always carefully marked off as a separate and peculiar race of mankind, in no way related to the Semite, for instance, who represented the north, while, as has been said, the Keftian represented the west. (ii) The facial type of the Keftians, splendidly exemplified in the first three figures in the great procession of tribute-bearers in Rekhmârā's tomb and also in the earlier tomb of Puamrā, is not only non-Semitic, but is definitely European. Puamrā's man has a Roman nose and looks rather like an Italian; the second man in Rekhmârā's tomb is absolutely Italian in type, and has a remarkably strong, heavy-jawed, almost 'nut-cracker' face, evidently a portrait: the first man, the 'Great Chief of the Isles,' is fairer, with a prominent nose, and a remarkably small mouth: his expression is considerably milder than that of his lieutenant. The rest are more or less conventionalized types, strongly approaching the ideal Egyptian; the utter dissociation from anything even remotely resembling a Semitic type is thus, except in one or two instances, which will be noted below, carefully emphasized by the Egyptian artists, who evidently regarded the Keftians as being, as was also the case with the Punites, more like themselves than the Semites. (iii) In the tombs of Puamrā, Senmut, Rekhmârā, and Menkheperrāsenb (reigns of Hatshepsut and Thothmes III., B.C. 1600–1550), their costume is as definitely non-Semitic. They wear only waistcloths, richly embroidered and coloured, often with spiral patterns, ending in a tasselled fringe, and twisted at the top round a thick belt, probably leathern. They wear boots, also gaily ornamented, reaching to the calf of the leg, and their hair was apparently allowed to grow to its full natural length and hung behind in long tresses below the waist-belt, while in front it was twisted up into an elaborate arrangement of top-knots or curls, one man wearing a kind of pointed horn or *κέρας* at the side. Now it was evident from the first that these were very odd Phoenicians, for no Phoenician that we know of ever dressed himself like this. I think we know now who did, and that is the Greek Mycenaean. But the Mycenaean was unknown in the days of Wilkinson and Brugsch, and in view of the Ptolemaic identification these people with the glaringly un-Semitic costume and the glaringly un-Semitic faces and hair had to be regarded as veritable Phoenicians of Tyre and Sidon. They dressed differently then, was the only explanation. But why, when all the rest of the Semites dressed in their usual Semitic fashion in voluminous parti-coloured robes, with comparatively short, bushy hair, &c.?

---

[1] *Geographische Inschriften, loc. cit.*

[2] I am indebted for this information, as regards the tomb of Puamrā, to Mr. Percy Newberry, who was kind enough to allow me, during a stay at Thebes in the early part of last year, to make many notes of his tracings, &c., of the wall-paintings in the tombs, which I have, with his permission, used to supplement the results of my own examinations of the representations of the men of Keftiu and their belongings.

---

[1] Mr. Torr's attempt to explain away this by the supposition that when the Egyptians spoke of Keftiu and Åsy as being in the West, the word 'West' need not here mean 'west' as a point of the compass, but may quite well mean 'the west country' in the sense in which that term is used in cuneiform inscriptions, namely, as a designation of the seaboard of Syria (*loc. cit.* p. 183) breaks up upon the fact of the pictures of the Keftians as representative of the Western point of the compass in the Theban tombs. But in any case his suggestion would have been impossible. The word *Amenti* means the western point of the compass, and was never used by the Egyptians as a designation for Syria as a translation of the Sumerian group *MAR-TU*, 'the West,' which a Babylonian, pronouncing it Aḫarru, naturally used for Syria. Had it ever been used in so confusing and absurd a way, we should find the lands of Tchahi, Rethnu, &c., spoken of as in 'the West': but we find no instance of this. I do not, as Mr. Torr says, imply that the Babylonian term was known to the Egyptians (generally): no doubt it was known to those who could read or write cuneiform, but to nobody else. The word *Amar*, used by the Egyptians as a designation for part of Syria, is probably a native name (the land of the *Amorites*), identical with a name for part of Syria, *Amurru*, which, since the syllable *mur* is written with the same sign as the syllable *ḫar*, was used by the Babylonians in the fifteenth century B.C. to designate the country known usually as *Aḫarru*, 'the West,' the Sumerian group *MAR-TU*. Neither *Amar* nor *Amurru* meant 'the West' to either Egyptians or Babylonians; they meant nothing more than *Amar* and *Amurru*.

With the discovery of the remains of the earlier civilization of Greece came the solution of the puzzle. It was seen that some of these Keftians brought as tribute objects of apparently Mycenaean origin; then the identity of their own general appearance with that of the Mycenaeans was shown. The conviction that the poet was right when he spoke of Keftiu and Àsy as western lands, and that the Keftians were nothing else but Mycenaeans, grew apace: Steindorff (1892) and Müller (1893) rejected the Ptolemaic identification with the Phoenicians almost contemporaneously, but the latter erred from excess of caution when he placed Keftiu in Cilicia, a country with no known connection with 'Mycenaean' civilization, and hardly belonging to the West. Apparently Müller regarded the Keftiu not as themselves genuine Mycenaeans, but as mere handers on of Mycenaean objects received from the West. And this in face of their Mycenaean dress! In 1898, v. Bissing gave some of the reasons for the rejection of the identification with the Phoenicians, and accepted the Keftians as Mycenaeans[1]; in the next year he announced that he had come to the conclusion that Keftiu included Crete in its signification.[1] This was a return to the opinion of Brugsch in 1858. The accuracy of Brugsch's conclusion was remarkably confirmed a year later, when the well-known fresco of the Cupbearer was discovered by Mr. Evans at Knossos; this man's appearance is the same as that of the XVIIIth Dynasty Keftians in the tomb of Rekhmârā:—the same waist-cloth with the same belt and fringe, the same hair, the same dark-red complexion, the same boots, carrying the same kind of vase, and in the same attitude. The comparison between the Keftians and the men of the Vaphio cups was confirmed, and the conclusion that they were Mycenaeans was natural; a direct connection between Greece and Egypt *c.* 1550 B.C. seemed thus proved. But the objection has been raised[2] that the Cupbearer may not be a Cretan at all; that as well at Knossos as at Thebes he may be the representative of some nation intermediate between Greece and Egypt, which sent tribute to the Mycenaean dynasts of Crete as well as to the Egyptian Pharaoh, the said nation being presumably the impossible Phoenicians or Cilicians. The objector forgets that whereas the Keftiu were foreigners in Egypt, this Cupbearer is not a foreigner in Crete; he is as Mycenaean as the men of the Vaphio cups, whom both he and the Keftiu so much resemble, and, after all, the picture of a Mycenaean found in Crete is presumably that of a Cretan Mycenaean.[3]

---

[1] *Jahrb. Arch. Inst.* xiii. pp. 53-54:—'(i) Except in the stereotyped Lists of Nations, the Keftiu only occur during the reign of Thothmes III.—with the Phoenicians, as is well enough known, the Egyptians had relations in later times as well; (ii) The Keftiu occur in none of the commemorative inscriptions or romances which deal with Phoenicia and Syria; (iii) The Keftiu are

I should be inclined to doubt, however, that Keftiu always = Crete and nothing but Crete. The fact that the word is Egyptian and has a connotation almost, though not quite, as vague as that of *Ḥa-nebu*, disposes me to think that the Egyptians of the XVIIIth Dynasty did not understand by the word any absolutely definite country such as Crete, but 'the Isles of the Great Green,' 'the Lands of the Great Ring,' in general, that is to say not only Crete, but the other Mycenaean lands behind it, the south-western coasts of Asia Minor, which no doubt seemed to the Egyptians a series of islands (much as the Antarctic continent is figured on our maps), and possibly even Cyprus, to which Mycenaean culture had apparently already penetrated from the West.

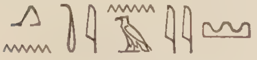
---

not mentioned in the Tell el-Amarna Letters, which are so well informed on all Syrian-Phoenician relations; (iv) Nothing in type or costume of the Keftiu indicates a Semitic origin' (*Transl.*).

[1] *Ath. Mitth.* xxiii. p. 248, n. 2.

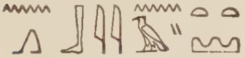
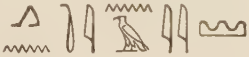
[2] Torr, *Class. Rev.* xvi. p. 184.

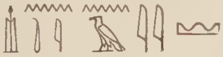
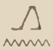
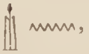
[3] That the men of the Vaphio cups, whose *coiffure* is in details the counterpart of that of the Keftians, were Cretans, seems, in view of the probability that these cups are really of Cretan workmanship, extremely likely.

Cyprus certainly was well-known to the Egyptians at this time; it had a name of its own—the full form of which I have restored—*Yantânay*,  ; this I take to be the same as the name of *Yatnan* or *Yatnana*, by which the Assyrians knew the island five hundred years later.[1] Another XVIIIth Dynasty foreign-land name, *Àsy*, already mentioned as used in connection with Keftiu to denote the lands of the West, was identified by the Ptolemaic archaeologists with Cyprus; the identification may be correct; if so, Àsy may have been really the name of part of the island only; Yantânay certainly was the whole, as it is described in the Stele of Canopus (l. 9), in a passage obviously copied from some now destroyed tribute-list at Karnak, as 'the island <Nebinaiti> (*read* Yantinaiti) which is in the midst of the Great Green Sea.'

The land of *Alashiya*, constantly mentioned by both Egyptians and Asiatics from the sixteenth to the eleven centuries B.C., has also been identified by Müller with Cyprus or part of it;[2] his identification was based on the fact that Alashiya was, as is evident from the Tell el-Amarna letters (*temp.* Amenhotep IV.; *c.* 1430 B.C.), a maritime country under an

---

[1] *Oldest Civilization of Greece*, p. 163. The word was only known in a mutilated form . . . . *ntanay*: the first syllable being unknown. I identified it with a Ptolemaic name for Cyprus , '*Nebinaiti*,' which, as it stands, is corrupt and impossible; it is a misreading of a hieratic original of the XVIIIth Dynasty, giving the true form  for the mutilated word in the inscription of Thothmes III. (Lepsius, *Denkmäler*, iii. 30*a*, 18), which is obviously the same as the Assyrian name for Cyprus, *Yatnan* or *Yatnana*. Mr. Torr has misunderstood me on this point, and has also fallen into a serious error as to a matter of fact. He says (*Class. Rev.* xvi. p. 183), 'the author says that Asi was "certainly part of Cyprus," but he does not give any reasons for saying so. As a matter of fact, Asi was supposed to be Cyprus, because the Canopic decree of 238 B.C. was supposed to have a name like *Asi* in the hieroglyphic text to represent the name *Cyprus* in the Greek text. But on p. 163 the author has a long note, showing that the name in the hieroglyphic text has been misread and is not the least like Asi.' But, *as a matter of fact* Àsy is not mentioned in the Canopic decree at all, and, further, in my note on p. 163, I never said that the name in the hieroglyphic text of the Canopic decree had been misread as 'Asi.' When I say 'Nebinaiti,' I do not mean 'Asi.'

(In his article 'Die Urheimat der Philister,' in *Mitth. Vorderasiat. Ges.* 1900, p. 8, W. M. Müller suggests . This is possible, and gives practically the same result, *Antânay*. But I prefer  to , in view of my identification of the XVIIIth Dynasty word with the Ptolemaic 'Nebinaiti.' This identification is not made by Müller, nor has he perceived the identity of *'Antânay* or *Yantânay* with the Assyrian *Yatnan*.)

[2] *Das Land Alašia*; *Zeits. für Assyriologie*, x. (1895) p. 257 ff.

independent king, which mined and exported copper to Egypt. But ivory was also exported to Egypt by the Alashiyans, and Cyprus was surely never a land of elephants! Müller's suggestion that this ivory came not from Mesopotamia, where as we know from both Assyrian and Egyptian records, the Indian elephant ranged at this time and for many centuries later, but from Libya, is improbable, to say the least of it. But in spite of the ivory export I hold with him that Alashiya must be Cyprus, because not only was copper exported thence, but was actually mined there: in a letter written in Babylonian, the usual diplomatic medium—the French, in fact—of the time, the king of Alashiya writes to the king of Egypt, apparently Amenhotep III., saying 'Brother, should the small amount of the copper [sent to thee] be displeasing to thy heart, [it is] because in my land the hand of Nergal my lord slew all the men of my land [*i.e.* they died of the plague], *and there was no working of copper*; and it was, my brother, not pleasing to thy heart. Thy messenger with my messenger swiftly will I send, and whatever amount of copper thou hast asked for, O my brother, I, even I, will send it thee.'[1] Now copper was apparently not mined in ancient times anywhere in the eastern Levant except in Cyprus, so that Alashiya must be Cyprus, and the ivory must have simply come from Mesopotamia to Egypt viâ Cyprus. We know from the finds in Cyprus that the Cypriote Mycenaeans, like the peoples of Asia Minor (*Iliad*, iv. 141), were greatly given to work in ivory. If, however, it can be proved that copper was ever mined anywhere on the Cilician coast, the Cyprian claim would be jeopardized, for the rest of the evidence points as much to the mainland as to Cyprus. The fact that the Alashiyans were raided by the Lukki or Lycians proves nothing as to their exact geographical position, and the Egyptian envoy Uenuâmen, who in the reign of the priest-king Ḥerḥeru, four hundred years later, was driven by contrary winds from the Phoenician coast to Alashiya, may quite as well have been carried to Cilicia as Cyprus. And the fact that the Alashiyans used the Babylonian cuneiform script, like the rest of the mainlanders as far as the Taurus, points rather to a continental than an insular position; we have no proof that cuneiform ever gained any foothold in Cyprus, where at this period, a pictographic script possibly analogous to the Cretan, seems to have been in use. Further, there is the question of the ivory. But at present Cyprus has the best claim to be Alashiya.

---

[1] "Aḫi, kî siḫêr erû ina libbi-ka lâ išakîn, šumma ina mâti-ya kâti Nergal beli-ya gabba amelûti ša mâti-ya idûk, *u ebîš erî yanu*; u, aḫî-ya, ina libbi-ka lâ šakîn. Maršipri-ka itti maršipri-ya arḫîš uššîr, u minûmme erî ša terîššu, aḫî-ya, u anaku ultebilâk-ku." (Budge and Bezold, p. xxxvi.)

Müller's identification of the land of Arṣapi or Arṣawi, also mentioned in the Tell el-Amarna letters, with Alashiya is simply 'Sache des Glaubens': the name of its king, Tarkhundaraush, definitely points to Cilicia as his home.

The same writer's further argument that Alashiya (so called by the cuneiform-using peoples, and spelt *Alasa* by the Egyptians of Amenhotep III.'s time) is really the same as the land of Åsy, probably vocalized Å's$^{e}$y$^{a}$, of Thothmes III. (the *l* being dropped in the earlier and less correct pronunciation, but restored when the cuneiform spelling showed the Egyptian scribes the proper transliteration), is not only ingenious, but extremely probable. This identification simplifies matters considerably; we no longer have to accommodate at least three land-names with territory in Cyprus.

Yantànay then is certainly the whole of Cyprus; Alashiya, called A's$^{e}$y$^{a}$ by the Egyptians until they learnt to spell it properly as Alas$^{y}$a, is probably part of it, though the very doubtful Cilician possibility must not be altogether lost sight of.

It seems probable enough that the term Keftiu, though not identical with Cyprus alone, as Birch and Chabas maintained,[1] included Cyprus; the Keftians of Rekhmàrā's tomb bring ivory to Egypt, as the Alashiyans did, and the King of Yantànay sent Thothmes III. as a present a silver vase 'of Keftiu-work,' which at least shows connection, if identity be not conceded; and the fact that Å's$^{e}$y$^{a}$ (Alashiya) and Keftiu are mentioned separately in the 'Hymn of Amen' as representing the West, need not mean that the first, which was the name of a single land, was never included in the second, which was a vague geographical designation. If, however, the distinction is insisted upon, and Cyprus is considered outside the boundary of Keftiu, then the last name is simply pushed further to the west, in the direction of Crete and the Aegean, which were certainly included in it in the times of Hatshepsut and Thothmes III. Archaeological research in Crete has shown us that Greece proper was in communication with Egypt at least as early as the time of the XIIth Dynasty, and that these relations were continued under the XIIIth, and during the Hyksos or 'Intermediate' period: the tombs of the XVIIIth Dynasty at Thebes have shown us that Mycenaeans, probably of Crete, had set foot in Egypt as early as 1500 B.C.

---

[1] *Mémoire sur une Patère égyptienne*; pp. 23 ff., 50 ff. Brugsch preferred Crete. Both were right, if Keftiu includes both Crete and Cyprus.

And now I come to a point which bears on the question of the route which Cretans would take to get to Egypt at this time. *Keftiu* is mentioned in the same sentence with *Åsy* (Alashiya) which, if it is not Cyprus or part of it, must be placed on the Cilician coast, and in lists of foreign peoples is always mentioned in conjunction with the Syrians and before the Kheta. That is to say, Keftiu was away beyond the Kheta, and at the same time could be placed in juxtaposition to the Syrians. I took this to be a further indication that Cyprus was intended to be included in the Keftiu-countries, for this is precisely the geographical position usually assigned to Alashiya, but if Keftiu is really Crete, Rhodes, and the Aegean islands only, why is Greece mentioned in this category, unless we assume that the Cretans came to fight viâ Cyprus and the Palestinian coast? If they came across the sea direct to Libya, why are they not rather mentioned in conjunction with Libyan tribes than with those of Asia Minor and Syria? I think this point in favour of my view is worth examination.[1]

The Mycenaean objects depicted on the walls of XVIIIth Dynasty Theban tombs (in the necropolis-hill of Shêkh 'Abd al-Ḳûrna) as brought by the Keftiu to Egypt, are chiefly metal vases of various kinds, among which the familiar *Bügelkanne* does not figure, though golden *Bügelkannen* are represented three hundred years later in the tomb of Rameses III.[2] More especially we see (Fig. 1) long one-handled vases of the type of the *Trichter* or False *Trichter* (without the hole: a Mycenaean beer-warmer!) like those figured by Furtwängler-Löschcke, vii. Fig. 42, xi. Fig. 71; and precisely like that carried by the cupbearer at Knossos.[3] These vases are very characteristic of the Keftians. The warrior with drawn sword who looks back to make some remark to his comrade who follows in the great procession of Mycenaean gift-bearers in the tomb of Rekhmárā (Fig. 2 below) carries a great white vase with curved handles, which, as v. Bissing has pointed out,[1] are exactly like those of the well known alabaster vase from Mycenae (Schliemann, *Mycenae*, Fig. 356). I think, however, that this vase was of silver. The sword carried by this warrior is remarkable: the type is definitely European. Hitherto the form of the hilt has been incorrectly reproduced in all drawings of the Keftiu; I have given it more accurately in Fig. 2, though the pommel should be rounder, and may be compared with that of the sword represented on the remarkable onyx cameo discovered by Mr. Evans at Knossos in 1902. The whole sword bears a remarkable resemblance to a well-known type from Italy, of Early Bronze Age date, of which several specimens are preserved in the British Museum, Ethnological Department.[2] The date usually assigned to these Italian swords, or rather daggers, by students of European archaeology, is about 1600 B.C., which is, within fifty years, the exact date of the Rekhmárā frescoes. A development of this early form, which also bears considerable resemblance to our Keftian weapon, is known from Italy and Greece in later days. The Mycenaean swords from Ialysos are quite different in type, having a cross-guard.

---

[1] Also the use of the 'Ring' and 'Circle' terms for the Mediterranean lands looks to me as if the earliest way of getting to Crete was by circling round the coast-line; you began with the Fore Lands to the east of the Delta, passed on to the first twist round (the *debn* of the VIth Dynasty?) to Palestine, then reached the next 'left incline' at the 'Circle' (Kedi, the Gulf of Issos) and passed along the coasts of the Back of Beyond, the Hinder Lands, to the southerly turn which brought you to the Isles of the West.

[2] That the clay *Bügelkanne* had already reached Egypt at this time is shown by the specimen (doubtless of Cretan origin) from the Maket tomb at Kahun (temp. Thothmes III.).

[3] A similar 'beer-warmer' in Egyptian blue faïence of late XVIIIth or XIXth Dynasty date is preserved in the Fourth Egyptian Room of the British Museum (No. 22,731), where it is exhibited together with two XIXth Dynasty blue faïence *Bügelkannen* (No. 30,451); the first two published by me in *Oldest Civilization*, Figs. 53, 52). No. 22,731 is presumably the *Trichter* mentioned by v. Bissing, *Jahrb. Arch. Inst. loc. cit.*

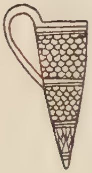


FIG. 1.
(Tomb of Rekhmárā.)

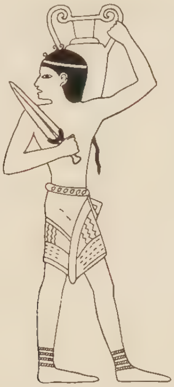


FIG. 2.
(Tomb of Rekhmárā.)

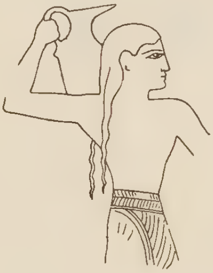


FIG. 3.
(After Virey, *Tombeau de Rekhmárā.*)

---

[1] *loc. cit.*

[2] Temple Bequest, 1856; W. T. 703: Blacas, 1867. The same type is also known from Neuenheiligen in Germany (*Horae Ferales*, vii. 10) and La Guillotière in France (*ib.* vii. 8).

Another Keftian from the same tomb, carrying a very Mycenaean *prochous*, is also figured above (Fig. 3). In the tomb of Menkheperrāsenb two silver vases, each with a single line of embossed or inlaid spirals running round the centre, have handles not distantly resembling those of the famous golden δέπας ἀμφικύπελλον from the tomb at Mycenae (Schliemann, *op. cit.*, Fig. 346). In the earlier tomb of Senmut, now unhappily ruined but for the precious fragment of fresco in the north-western corner of the forehall, which contains what is left of the Keftian representations, are carefully depicted several cups of the type of the famous Cups of Vaphio, and the silver cup from Enkomi, but of more elaborate workmanship than the last and of enormous size. These vases were very accurately reproduced in colour by Prisse d'Avennes in his *Histoire de l'Art Égyptienne* (*Vases des Tributaires de Kafa*, Nos. 2, 9,) of which the blocks in my *Oldest Civilization of Greece* are tracings: the illustrations given above (Figs. 4, 5) show them more correctly, however. Both vases are of silver inlaid with gold. A fragment on the extreme left, where the wall is broken away, shows a golden vase of the same type, decorated with inlaid copper spirals (Fig. 6). A vase of similar type, but rather more elongated shape, is depicted among the Keftian gifts in the somewhat later tomb of Menkheperrāsenb; it bears an inlaid design of two bucrania, with horns interlaced. This remains as yet unpublished. The type occurs again, four hundred years later, in the tomb of Imádua, who lived in the time of Rameses IX., Neferkarā, of the XXth Dynasty, as late as 1100 B.C. This brings the Mycenaean period down later than the usual

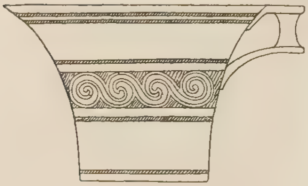


FIG. 4.

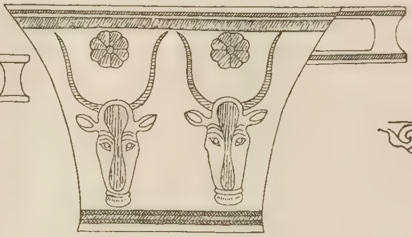


FIG. 5.

(Tomb of Senmut; after Prisse d'Avennes, corrected in accordance with my notes, 1902.)

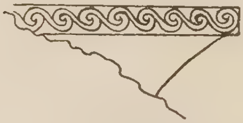


FIG. 6.

(Sketched in the Tomb of Senmut.)

theories of date would allow, and very near the time of the Pinetchems and Pisbankhas. Besides the vases of Vaphio type, the Keftian on the extreme right carries on his shoulder a magnificent prochous, the lower part of which is of gold, the upper, with neck and handle, of silver; a chased band of silver masks the junction (Fig. 7); the raised ring on the shoulder is found on Cretan vases, *cf.* those from Zakro published by Hogarth in *J.H.S.* xxii., pl. 12, stone vases and others of Kamáres ware, from Knossos, published by the same writer in the *Annual* for 1899–1900 vol. vi., Fig. 24. (A similar ring occurs on the great white vase in the tomb of Rekhmārā, already alluded to.) His second fellow to the left carries a massive vase of copper or bronze with a heavy mouth, four ring handles at its greatest circumference, and four near the base, which is a massive ring-stand with a projecting band close to the lower edge; in line with the upper set of handles is a band of rosettes (Fig. 8). This remarkable vase has already been figured, not quite accurately, by Prisse d'Avennes, *loc. cit.*, followed without correction by Müller, *Asien u. Europa*, p. 349. It appears to me to bear considerable analogies to the appearance of certain types of Kamáres pottery which are evidently derived from metal originals. (*Annual*, vi. Figs. 24, 27 [8]). The two sets of handles occur on the great Knossian *pithoi.* Among the tribute in Rekhmārā's tomb are also depicted, besides a fine silver prochous with beautiful gold bands of spirals covering its body,[1] a great golden *protome* of a bull,[2] exactly resembling the famous silver bull's head with the golden rosette on its forehead which was found at Mycenae, and other *protomai* of animals, especially lions.

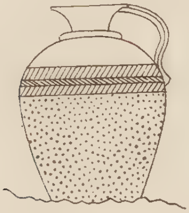


FIG. 7.

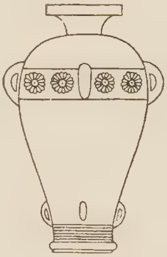


FIG. 8.

(Sketched in the Tomb of Senmut.)

---

[1] Prisse d'Avennes, *loc. cit.* 4; *Oldest Civilization*, Fig. 47.

[2] *Ibid.* Fig. 21.

Which of these, we wonder, is of the type of the 'silver *shauabti* vase of the work of Keftiu' which was sent to Thothmes III. in the forty-second year of his reign by the king of Yantânay? And were the 'four vases of bronze with silver handles, weighing 56 *debn* 1 *ḳedt*,' sent at the same time 'with all the good things of that land,' also Mycenaean? The productions of the Mycenaean art workers might well seem good to the Egyptian chronicler, and certainly the Egyptian decorator of the tomb of Senmut did his best to perpetuate their goodliness for all time.

Most of these Mycenaean objects seem particularly Cretan in appearance, and it seems very probable that these embassies came from Crete during the great age of Knossos and Phaistos.

But among the Mycenaean vases brought by the Keftians are also others which are not of Mycenaean workmanship. These are apparently Phoenician imitations of Egyptian work, since in style they are more or less Egyptian. This fact compels us to believe that much of the commerce between the Keftian lands and Egypt filtered through Phoenician channels, and that the Keftian ambassadors quite possibly came *viâ* Phoenicia, and in Phoenician ships. The Phoenicians were active navigators and merchants then and afterwards; all the Phoenician cities known to us in 'classical' times were already great and flourishing, and, as we see from the Tell el-Amarna letters, which have shed so priceless a light upon the state of the Nearer East in the fifteenth century B.C., were devoted, as careful merchants and bankers should be, to the interests of the protecting arm of Egypt. The bulk of the commerce between Egypt and the Mediterranean lands was evidently carried in Phoenician bottoms, and in a tomb of this period at Thebes there existed till lately a fresco, discovered and published by M. Daressy,[1] which depicted the busy scene at the Theban quays on the arrival of a Phoenician merchant-ship, with its beak-nosed owners in their voluminous and multi-coloured robes on board, one of whom carries a small Mycenaean amphora of the type of one found in Egypt and now exhibited in the Egyptian Department of the British Museum (No. 4858; *Oldest Civilization of Greece*, Fig. 49).

That this importation from Keftiu of Mycenaean objects, and probably of Mycenaean ambassadors also, by Phoenicians occasionally led to some confusion in the minds of the Egyptians is natural, and the result is that occasionally we find Keftian tribute-bearers represented as approximating to the Semitic type.[1] No doubt the question may fairly be asked whether this is really a mistake, and whether undetermined Semites from the far north were not sometimes included in the Keftian names as well as the Mycenaeans. But this is hardly possible, for in the most carefully decorated tombs, such as those of Senmut and Rekhmårā, the people from Keftiu are always depicted as Mycenaeans of the type of the Knossian cupbearer and the bull-catchers of the Vaphio cups: the representation of Keftians as Semites is unusual, and only occurs when the subject is bearded; the influence of use and custom seems then to have inclined the artist's hand to approximate to the Semitic type. But when Mycenaeans are correctly represented they are always described as Keftians and bear no other name. It seems then that when the Egyptian artist represented Keftians as Semites, he was simply making a mistake. In any case the fact cannot be taken to support the obsolete view that the Keftians were Phoenicians, seeing that when Mycenaeans appear they are always called Keftians, and after all that has been urged to the contrary above.

---

[1] *Rev. Arch.* xxvii. (1895) pll. 14–15, Maspero, *Premières Mêlées*, p. 407.

Keftiu then is primarily the North-western coasts of the Mediterranean, from Crete to Cyprus: and it is possible that the name was also used in a restricted sense to denote Crete alone.

## IV.—THE PEOPLES OF THE SEA.

We can now turn to the tribes of the Mediterranean, not described as Keftians, who came into contact with the Egyptians during the period between the XVIIIth and XXIst Dynasties (*c.* 1500–1000 B.C.), and are generally known as the mysterious and much-disputed 'Peoples of the Sea.' With the end of the XVIIIth Dynasty the word *Keftiu* disappears from the Egyptian monuments, and seems to have been no longer generally used. A list of Keftian proper names on a writing-board and a list of words of the Keftian language on papyrus, which date to the end of the XVIIIth Dynasty, are the last records of the men of Keftiu. In the place of the vague geographical term *Keftiu* we now meet with the names of individual tribes of the Great Green Sea, known to the Egyptians as piratical warriors who made the traversing of the sea unsafe for peaceful merchants and travellers, and from time to time descended in predatory hordes, allied with the restless tribes of Libya, upon the Egyptian Delta, with no other mission but to burn, to kill, and to enslave, or allied themselves with either Egyptian or Kheta for pay and subsistence. The peaceful and highly-civilized Keftians disappear, but Mycenaean culture did not disappear from the ken of the Egyptians with them. The XIXth Dynasty foreign settlement at Gurob has yielded Mycenaean vases; Mycenaean 'Bügelkannen' and 'Trichter' were imitated in Egyptian blue *faïence* by the XIXth Dynasty potters, and Mycenaean 'Bügelkannen' and *pithoi* of copper and gold are depicted among the costly κειμήλια of the tomb of King Rameses III. of the XXth Dynasty (*c.* 1200 B.C.); even later traces of Mycenaean art may be noted in Egypt. Thus, during the whole period of the piratical activity of the 'Peoples of the Sea' Mycenaean civilization was in existence, and in connection with Egypt. And we shall see that many of these peoples must have been Mycenaeans, while others, if probably outside the circle of Mycenaean culture, lived so close to its confines that they must have been considerably influenced by it.

---

[1] In the tomb of Menkheperrāsenb, once or twice; in the tomb of Åmenemḥeb, the well-known General of Åmenḥetep II., usually.

It was natural that in the days before Schliemann De Rougé's identification of many of them with Dardanians, Danaans, and Achaians, and all the host of the wars of Troy should have met with considerable incredulity; and it is true that some of his identifications never held water. But we now see that others were by no means so absurd as they were perhaps naturally considered to be in the 'sixties, and the historical insight of Prof. Maspero has succeeded in sifting the wheat from the chaff with regard to them so well that there remains but little for others to do.

In the Tell el-Amarna letters three tribes are mentioned which we do not meet with on the monuments of the XVIIIth Dynasty. These were the *Lukki*, piratical seafarers who raided the lands of the king of Alashiya, the *Sirdana*, apparently mercenary soldiers who served any master for pay, and the *Danuna*, a tribe settled on the Canaanitish coast. That the Lukki are Lycians there is no reason to doubt, but Mr. Torr has suggested (*Class. Rev. loc. cit.* p. 184) that they were rather the inhabitants of the land of *Lakî*, mentioned among the conquests of Asshur-natsir-pal, which he places in Phoenicia and identifies with the valley of the Lykos, the modern Naḥr el-Kelb. But we know perfectly well where Lakî was: it is definitely described in the inscription quoted by Mr. Torr as being partly 'on this [*i.e.* the Assyrian] side of the Euphrates,' and extending to the region of the

Upper Tigris (the *Subnat* or Sebene-su), *i.e.* the district of Diarbekr. The inscription does not mention any 'great sea of the land of Lakî,' but, like others of the same king, speaks of Asshur-natsir-pal as 'the king who from beyond the Tigris even up to Mount Lebanon and the Great Sea, the whole of the land of Laḳî, and the land of Sukhi, together with the city of Rapiḳi, hath cast into subjection under his feet, and (the territory) from the source of the river Subnat up to the pass which lieth over against it hath conquered with his hand.'[1] Since Lakî is certainly the district between the Upper Euphrates and the Tigris, and Lukki was a Mediterranean country with ships and seamen, there is no need to point out also the philological impossibility of identifying *La-ki-e* with *Lu-uk-ki.*

Since, then, we have no Assyrian, Phoenician, or Biblical record of any people, land, or river in this neighbourhood with any name resembling *Lukki* and Lykos, and it is inherently probable that the Naḫr el-Kelb has always been called the 'Dog River,' and that its Greek and Arabic names are translations of the original Phoenician, Mr. Torr's identification of the country of the Lukki with the little gorge of the Lykos (which, by the way, has not much room for inhabitants) will hardly hold. That the *Lukki* were no mere inhabitants of a Phoenician fishing-village is shown by the fact of their appearance as a nation side by side with the 'Cilicians' and 'Pisidians,' among the allies of the Kheta in the war against Rameses II. We have no reason whatever to refuse to recognize in them the Lycians.

It is on the occasion of this war against Rameses II. that the northern tribes next cross our path. The princes of the Kheta, whose main seat seems to have been Cappadocia, and whose empire seems to have spread at one time or other westward to Mt. Sipylos and in the fourteenth century B.C. had been extended as far south as Northern Palestine, found the new dominion over the Syrians which they had acquired during the *fainéance* of Khuenàten seriously threatened by the warlike activity of Seti I. of Egypt and his son Rameses, both of whom aspired to restore to Egypt the Asiatic dominion of Amenḥetep III. Accordingly they joined to them the forces of their dependents and allies in Asia Minor and advanced to meet the Egyptian attack, which, however, triumphed at the Battle of Kadesh. Among these allies are the following foreign tribes of the north: the people of Luka, who are the same as the *Lukki* or Lycians, those of Pidasa (*i.e.* the Pisidians), of Kalakisha (the Cilicians), and three others, the tribes of Dardenui and of Masa, and of a land whose name has been variously read as Maunna, Ȧriunna or Iliuna, and Iaunna or Yevanna. Of the identity of the Kalakisha, the Pidasa, and the Luka there seems little reason to doubt: the *-sha* termination of the name of the first is, as I have pointed out,[1] merely the Asia Minor nominal suffix *-azi* or *-aza*, which we find in Lycian, and is the well-known termination *-ασσις* or *-ασσος*, so characteristic of Asia Minor place-names. Prof. Petrie, however, has lately suggested[2] that Kalakisha (Qarkish) rather = Kirkesion on the Euphrates, and that the Pidasa were not Pisidians or Pedasians (Leleges) but people from the river Pidias (Prof. Petrie uses the modern form) in Cyprus. I am unable to see that the last supposition has anything in its favour. The name of the Pediaeus is purely Greek, and cannot have existed in pre-Hellenic times: it was so obviously conferred because this river flows through the only plain of Cyprus. We cannot even accept Prof. Petrie's suggestion with the necessary corollary that Greek was already spoken in Cyprus *c.* 1300 B.C., because the people who came from the banks of the Pediaeus would in that case have been the Πεδιαῖοι: the final ς would have disappeared, and so the Egyptians could not have represented it as *Pi-da-sa*. In any case, Prof. Petrie himself points out that the allies were 'a body of chariots': is it not more likely that the Pidasa were continentals like the rest than that they were a small 'body of chariots' specially, and with great trouble, transported from Cyprus? Prof. Petrie accepts the equation Luka = Lycians: why not identify their companions the Pidasa with the neighbouring Pisidians or with the Pedasians of Caria (Leleges)?[3] The other identification is thus far probable: now that we know the meaning of the *-sha* termination, it seems to me, as before, that the identification of *Karaki-sha* or *Kalaki-sha* with the Kilik-ians is the natural one, but it may well be that Kirk-es-ion may have been a settlement of Karakisha (Kilikians). The conjunction with Carchemish (which itself possibly ends with the Asia Minor termination) is in favour of Professor Petrie's identification with the Kilikian settlement on the Euphrates rather than with the race in general.

---

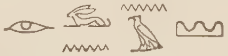
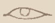
[1] Transl. by Budge and King, *Annals of the Kings of Assyria*, p. 344. The text reads :—'Šarru ša ištu ebirtân Idiglat adi Labnana u tâmdi rabîte, Lakî ana siḫirti-ša Šuḫi adi Rapiḳi ana šêpê-šu ušikni-ša, ištu rêš eni Sûbnât adi nirib ša bitani kât-su ikšud.' The passage giving the exact position of Lakî reads :—'Alâni ša šêp annate ša Puratte ša Lakî ša Suḫi' (*ib.* p. 355). Further, the cities of the land of Lakî were reached after the king had gone up into the narrows of the Euphrates, and in other inscriptions the country is spoken of as lying between Carchemish and Urartu (Ararat).

---

[1] *Oldest Civilization of Greece*, p. 178.

[2] *Proc. Soc. Bibl. Arch.* xxiv. p. 317.

[3] *Oldest Civilization*, p. 100.

The further identifications of the *Masa* with the Mysians and of the *Dardenui* with the Dardanians, tempting though they are, we may perhaps hesitate to accept fully until some further light has been thrown upon the whole question of the exact geographical limits of the Kheta dominion. There is no proof of the validity of these identifications beyond remarkably close similarity of name, and the Mysians and Dardanians are rather far afield ; the Mysians in fact were still astride the Hellespont in Homeric days. Prof. Petrie suggests *Jebĕl Musa* near the Orontes and *Jebel Durdun* in Cilicia. I cannot see that the first need be any more than 'Moses' Hill,' but the second is more probable. But still the Dardenui who lived in Cilicia in Rameses II.'s time and left their name in Jebel Durdun may be the same as the Dardanians who lived in Phrygia in Homeric days. When the Dardenui were regarded as Dardanians of Troy it was natural enough to read the name  as *Ȧriunna* and so identify it with Ilion (*Iliunna*): alternative readings *Ma-un-na* (=Maeonia?) and *Iaunna* or *Yᵉ-wᵃn-na* (=Ionia?)[1] have been proposed. Prof. Petrie has now, it seems to me, found the most probable identification. He reads *Ȧri-wen-na* and identifies with Oroanda. This fits in entirely: *ȧri* is the most usual value of , and the termination *-na* corresponds, as it should do, with an ending in *-nda*. Another name of the allies, *Katchauadana*, Prof. Petrie identifies with *Kataonia*.

Here then we have a body of allies drawn by the Kheta from the western confines of their kingdom, the centre of which was Cappadocia; Cilicians of several tribes, Kataonians (?), Oroandians, Pisidians or Pedasians (Leleges from Karia), and Lycians. The Lycians are thus mentioned for the second time in Egyptian annals. The majority of these tribes were, as far as we know, non-Mycenaean, but that Leleges and Lycians were in the fourteenth century B.C. if not comprised within the circle of, at least strongly influenced by, Mycenaean culture, which we find in full activity in Crete and perhaps in Rhodes also in the sixteenth, is inherently probable.

---

[1] W. M. Müller, *Asien u. Europa*, p. 369. This is the least probable reading and identification. I have already noted (*Oldest Civilization*, p. 129) that no 'Yivana' are mentioned in the Tell el-Amarna letters.

We next meet with the Peoples of the Sea nearly seventy years later, when the long reign of Rameses II. had come to an end, and the state of decadence into which Egypt had sunk during the old age of her 'Grand Monarque,' is significantly marked by the ravaging of the Delta by the hosts of the Northerners in alliance with the wild marauders of Libya, led by the chiefs of the Masha or Mashauasha.[1] The Northerners seem to have reverted to the time-honoured traditions of the Ḥa-nebu, the peaceful intercourse with Keftiu is forgotten, and the Mycenaeans of this latter day appear simply as marauding vikings, 'fighting to fill their bellies daily,' as the Egyptian record pithily puts it.

The *Meḥtiu* who had 'come from all quarters' and 'from the lands of the Great Green . . . . to Egypt, to seek food for their mouth,' whom 'the miserable Libyan led hither,' consisted of, besides the Luka again, the *Akaiuasha*, the *Turusha* or *Thuirsha*, the *Shakarusha* or *Shakalesha*, and the *Shardina*. These last we have met already. They are the same as the mercenary soldiers of the *Sirdana*, mentioned in the Tell el-Amarna letters two hundred years before, and, the Varangians of their day, under Rameses II. they enlisted in the Egyptian service as life-guards.

De Rougé's identification of the Akaiuasha with the Achaians has only once been challenged, by Brugsch, when he felt an uncontrollable desire to banish the whole collection of Peoples of the Sea to the Caucasus.[2] The supposed difficulties in the way are non-existent: the representation of χ by the Egyptian *q* (*ḳ*) has an exact reverse parallel in the Assyrian name for the Cilicians, *Ḫilakku*; the *-asha* or *-sha* termination is merely the Asia Minor nominal suffix *-azi* or *-aza*, already referred to, with which most of these names, including even that of the Libyan Masha or Maxyes, end; and W. M. Müller has shown that neither the Akaiuasha nor any of the rest of these tribes were circumcised, as used to be thought the case.[3] *Akaiua-sha* means simply the 'Αχαιϝοί. Whether the use of the Lycian suffix shows that these proto-Achaians themselves still spoke one of the Asia Minor group of tongues, which, as Kretschmer has shown, at one time included the whole of Greece, insular and continental, in its territory, or whether it simply means that the Egyptians took their name down from an Asia Minor source, as was probably the case with regard to the Mashauasha, must remain uncertain: the former view seems very probable; Aryan Greek may not even yet (1200 B.C.) have been spoken far south in Greece.

---

[1] The Maxyes; see Budge, *Hist. Eg.* v. 150, vi. 39.

[2] *Egypt under the Pharaohs*, ii. 124.

[3] *Proc. Soc. Bibl. Arch.* x. p. 147 ff.

We have other somewhat earlier evidence of the presence of the Thuirsha on Egyptian soil in the name of an official, An-Tursha, whose grave was found at Gurob; that the foreigners in whose settlement the grave of this 'Pillar of the Tursha' (such is the signification of his name) was found were themselves Tursha or Thuirsha is a legitimate conclusion enough. I am no more able now than two years ago to give them a local habitation, and a more or less Greek name of their own. The 'Eastern Tyrsenians' of Asia Minor seem to be the Torêboi simply. And Italy is too far off to go for them, as is also the case with the Shardina. The next tribe, the Shakelesha, are undoubtedly, as Maspero concluded twenty years ago,[1] the Sagalassians of Pisidia. They are the representatives of the Pidasa of seventy years before. The identification absolutely hits the right nail on the head. The name is of the required Asia Minor form; Sagalassos = *Sagal-aza* = Shakalesha. And the Sagalassians are not too far off, as De Rougé's Sikels were. Mr. Müller rejects the identification with the Sikels (*Asien u. Europa*, p. 357) but accepts that of the Thuirsha with the Tyrsenians and that of the Shardina with the Sardinians; if the two last are probable, the first is equally so. For the identification of the Shardina with the Sardinians De Rougé was also responsible, but, in spite of the tempting resemblance of the name, it seems to me that if we remember that *-na* is also an Asia Minor nominal suffix, as well as *-asha*, it will seem evident that Maspero's identification with the Sardians of Lydia is far more probable. If we identify them with tribes of the Aegean and Asia Minor coast, we have all these peoples close to heel, and not careering off too far to the west. Also they are spoken of as coming from the direction of Asia, and, like the Keftians before them, in connection with the Kheta of Cappadocia.

The invaders were defeated by Pharaoh Merenptah at Piaru in the Delta, and there fell of the Libyans over 6300 men, and of the uncircumcised in all 2372 hands were taken as trophies, of which the Shakalesha contributed 250 (212 men) and the Turusha 790 (742 men).

---

[1] W. M. Müller (*Mitth. der Vorderasiatischen Gesellschaft*, 1900, p. 4) errs in attributing this identification to Herr C. Niebuhr, who seems, when he repeated it (*Orientalische Litteraturzeitung*, ii. 381) to have been unaware that Prof. Maspero had twenty years' priority of him in the matter.

The Akaiuasha, the Thuirsha or Tur(u)sha, and the Shakalesha apparently visited the Nile-land no more, but the subsequent history of the Shardina is interesting. We have seen that they served the Egyptians as mercenary soldiers in the time of Khuenàten and Rameses II.; they then turned against their old employers and fought them in the company of their own kith and kin; afterwards they again returned to their allegiance, and when the next shock of Northern attack fell upon Egypt fifty years later in the reign of Rameses III. the formidable Varangians proved true to the salt which they had eaten, and the 'mighty men of the Shardina' formed, with some Thuirsha, the backbone of the Egyptian army and fleet which overthrew the Philistines and their allies, among them apparently other Shardina, off the Syrian coast. The whole story presents a most curious parallel to the doings of the Northmen in the Middle Sea in the eighth and ninth centuries of our era.

After defeating another Libyan attack in his fifth year, three years ater Rameses III. found his kingdom threatened by a serious combination of the predatory Northerners; besides some Shardina, the *Purusatha* or *Pulesatha*, the *Uashasha*, the *Tchakaray* (*Zakar*), and the *Danaău* or *Danauna* are mentioned. The last-named have been already mentioned; they are evidently the *Danuna* mentioned in the Tell el-Amarna letters. That the Pulesatha must be the Pelishtim or Philistines is generally admitted, and tradition is unanimous in bringing the Philistines from Crete, which if it be Caphtor, gives a further reason for the identification of Keftiu with Crete. That the Philistines were an intrusive non-Semitic element in the land to which they gave the name of Palestine is evident, and there is no reason against the many reasons for an acceptance of the traditions which bring them from Crete.[1] We find no mention of them before this date, and it is at least probable that it was now that their migration took place. It is certain that they moved as a whole migratory people: they landed a large proportion of their men, women, and children, goods and chattels, for a large proportion of the invading host marched by land, with their households and household gods in rude two-wheeled carts drawn by oxen. It seems that the landing took place on the southern coast of Asia Minor, for the expedition is described, probably in exaggerated terms, as follows :—'The Isles were restless, disturbed among themselves at one and the same time. No land stood before them, beginning from Kheta (Cappadocia and Cilicia), Kedi (the 'circling' of the Syrian coast at the Gulf of Iskanderun), Carchemish, Arvad, and Alashiya. They destroyed them, and assembled in their camp in the midst of Amar (*Amurru* ; Palestine).' It is a regular *Völkerwanderung*, coming by ship from the isles, and ejecting an irresistible, slowly moving horde on to the coast west of Cilicia, which spread over Northern Syria, like a swarm of locusts, destroying as it went, while the ships coasted along the land, overwhelming Cyprus on the way, till the whole came to a halt on the Palestinian coast, where the Egyptian army and fleet met, and, according to the Egyptian account, in the amphibious conflict which followed annihilated the invaders. But in view of the fact that the Philistines were in full possession of Philistia not so very long after, we may well doubt the completeness of the annihilation.

---

[1] On this subject cf. Principal Moore's article *Philistines* in the *Encyclopaedia Biblica*, and the articles of W. M. Müller in the *Mitth. Vorderasiat. Ges.* for 1900. The latter is the first to comment on the occurrence of the name Caphtor in a Ptolemaic inscription at Ombos, as *Keptar* (p. 5). The fact that the translators of the Septuagint translated Caphtor by 'Cappadocia' shows that they were looking in the right direction for a country with a name resembling Caphtor.

Like the Pulesatha, the Tchakaray and Danauna who accompanied them were also primarily maritime tribes. The Tchakaray are mentioned as dangerous sea-pirates as late as the XXIst Dynasty (1050 B.C.) when the Egyptian envoy Uenuâmen was prevented by their ships from leaving the harbour of Byblos. Their personal appearance as represented on the Egyptian monuments is not merely un-Semitic, but definitely European, and since the name *Danauna* evidently ends with the same Asia Minor suffix as that of the Shardina (the simple form *Danaău* is actually found), it is evident that both tribes must be relegated with the Pulesatha to the 'Isles' from which the Egyptians said they came. So that the mention of the *Danuna* in the Tell el-Amarna letters merely shows that in the fifteenth century B.C. they already possessed a settlement on the coast of Palestine, just as the Tchakaray are still found in possession of the town of Dor in the time of Uenuâmen, nearly four hundred years later. These settlements are analogous to the isolated colonies of Teutons who squatted on the 'Saxon Shore' long before the main hordes of Saxons and Angles swarmed over into Britain and 'no land stood before them.'

If the Pulesatha, Tchakaray, and Danauna came from the Isles, so did the Uashasha 'of the sea.' The identity of the last three tribes is by no means so obvious as that of the Pulesatha. For the *Uashasha* I have suggested an identification with the Axians of Crete.[1] * *Waxaza* would be a correct *kleinasiatisch* translation of *Ἄξιοι*, and if the Pulesatha came from Crete, why not the Uashasha? I do not see that the objection that Axos is not a seaport town is valid: it no doubt had its dependent port either at Bali Bay or nearer the mouth of the Mylopotamos (Oaxes). The lower Oaxes valley would naturally belong to Eleutherna, but Eleutherna may itself have then been dependent upon Axos, whose name was identical with that of the river from source to mouth. But this is mere arguing in the clouds: I repeat my suggestion, relying on the fact that *Uashasha* must be an Egyptian transliteration of a *kleinasiatisch* * *Waxaza*, which would be a correct translation of the Greek *Ϝάξιοι*.

I went on to bring the *Tchakaray* and *Danauna* also from Crete, and adopted the old identifications with the *Τευκροί* and *Δαναοί* of Greece. The difficulty with the former is the *υ*. On account of this Müller has rejected the identification, but can propose no substitute. Nor can I, but since the presence of the *υ* forms a very valid objection, I am content to temporarily relegate the Tchakaray to the same limbo of uncertainty as the Thuirsha. The identification of the *Danauna* with the old tribal name of the *Δαναοί*, used to denote a tribe of Greece, probably Pelasgians, and not in its Homeric sense, is more than tempting. Müller regarded it in 1893 very cautiously as 'Sache des Glaubens,' but I imagine that now the *-na* termination has been explained, he would be more inclined to accept it, especially since we have the name in its simple form as *Danaȧu*, without the nominal affix.

Of the tribes which attacked Egypt under Rameses III., then, one is traditionally regarded as having come from Crete, and eventually settled on the Palestinian coast, where several finds of Mycenaean pottery, at Tell el-Hesy, Tell es-Safi, &c., point to a connection with Mycenaean peoples, if not to a Mycenaean population in Palestine itself; another possibly came from Crete; another may be Cretan Danaans, who established settlements on the Palestinian coast; the last is uncertain, but if the others came from Crete, why not it also?

There is nowhere else to place these tribes or the others before them.

---

*Oldest Civilization of Greece*, p. 177.

Whatever their names might be we should have no option but to place them on the southern coast of Asia Minor, in Crete and the Aegean; the Egyptian evidence is clear as to their origin; they are not Palestinians, but tribes of the 'Great Green Sea,' who came, like the Keftiu before them, from the 'Isles of the West.'

Their personal appearance on the Egyptian monuments is as un-Semitic as that of the Keftians. Often, as Müller has already remarked, the features of the Philistines (Fig. 9) and of many of the Shardina (*Oldest Civilization*, Fig. 50, right) at Medinet Habu are of the classical straight-nosed Greek type, and the Tchakaray (Fig. 10) are, as has already been remarked, European in face: in fact, all with occasional exceptions are definitely European in appearance, some with the moderately aquiline nose of the Italian (*Oldest Civilization*, Fig. 41; *Asien u. Europa*, p. 364), others with a decided snub (*Asien u. Europa*, p. 375; *Oldest Civilization*, Fig. 50, left). We have only to look at their portraits to see that they all come from west of the Taurus, and many no doubt from Europe itself.

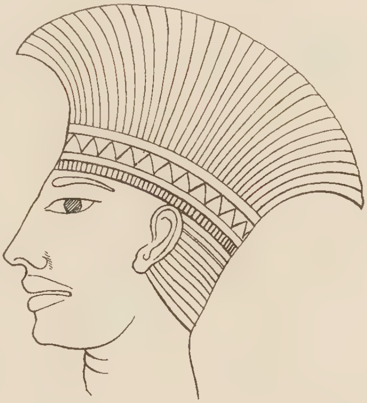


FIG. 9.—A PHILISTINE.
*Temp.* Rameses III. (Medînet Habu.)

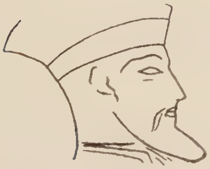


FIG. 10.—A TCHAKARAY.
*Temp.* Rameses III.
(Medînet Habu.)

Their costume points the same way. The Philistines, Tchakaray, and Uashasha wear the distinctive feather headdress which the Lycians wore at Salamis (Hdt. vii. 92) and which the Ionians are represented on the Assyrian monuments as wearing. It is worn by warriors on a Geometrical vase fragment from Mycenae,[1] and by a warrior armed with an axe on a carved draught-box from Enkomi.[2] The great round shields and long broad swords of the Shardina, which they retained in Egypt even when wearing an Egyptian gala-uniform, are absolutely European, as absolutely different from the shield and dagger or curved scimitar of Egypt as from the weapons of the Semites.

---

[1] Wide, *Jahrb. Arch. Inst.* xiv. p. 85.

[2] Murray, *Excavations in Cyprus*, p. 12, Fig. 19.

The shields are quite Homeric: the swords Mycenaean enough. The Shardina usually, the others sometimes, wore body-armour, as we see in the representation of the sea-fight with Rameses III. (Fig. 11). Further, the dress of these warriors is, as has been pointed out by W. M. Müller (*Asien u. Europa*, p. 378), identical with that of a warrior represented on an Ialysian gem (Furtwängler-Löschcke, *Myk. Vasen*, E. 30).

'And so, perhaps, the warriors of the Akaiwasha, the Danaúna, and the rest, to whom Zeus had indeed given it "from youth even unto age to wind the skein of grievous wars until every man of them perished," were the representatives in the second millennium B.C., of the historic peoples whose names they seem to bear.' And at this time at least some of these tribes must have been comprised within the circle of Mycenaean civilization. We have however no definite ascription of Mycenaean objects to them, as in the case of the Keftians; but, although the Mycenaean pots at Gurob may not have been brought there by Thuirsha, their occurrence in a foreign settlement one of whose officials was a Thuirsha certainly connects this tribe with Mycenaean culture; and the finds of Mycenaean pottery in the domain of the Philistines point in the same direction. It is noticeable moreover that in the XIXth Dynasty and in the reign of Rameses III. the *Bügelkanne*, more characteristic of the later or true Mycenaean period than of its earlier or 'Minôan' phase, became very much sought after in Egypt. We see *Bügelkannen* of gold and of copper in the tomb of Rameses III. which bear the same zigzag ornament as do the already mentioned small Egyptian blue faïence false-necked vases in the British Museum (Fourth Egyptian Room, Nos. 30,451): great *pithoi*, perhaps also

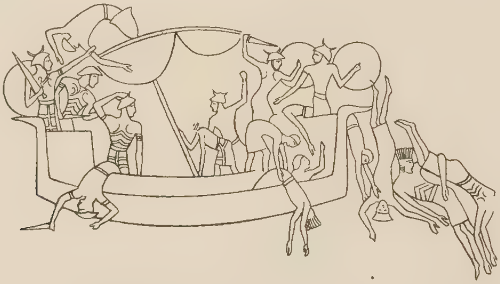


FIG. 11.—A SHIP MANNED BY SHARDINA AND PHILISTINES, ATTACKED BY THE EGYPTIANS. *Temp.* Rameses III. (Medînet Habu.)

of Mycenaean origin, represented with these, are ornamented either with the same pattern or with un-Egyptian wavy lines strongly suggestive of the raised ornament of the *pithoi* of Knossos and Ialysos (Fig. 12).[1] In fact, the latter phase of 'Mycenaean' culture exemplified by the discoveries at Ialysos was in operation in the days when Egypt was attacked by Mediterranean tribes of European aspect, often bearing names identical with Greek tribal appellations, some of whom can only have come from lands then comprised within the circle of Mycenaean culture. Those were days of *Sturm und Drang* in the Eastern Mediterranean and probably in the Mycenaean lands also. There has been a great change from the

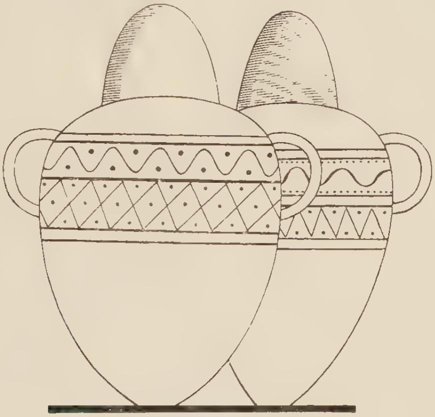


FIG. 12.—REPRESENTATIONS OF MYCENAEAN (?) METAL *Pithoi*: TOMB OF RAMESES III. *Circa* 1200–1150 B.C.

days of the 'Great Men of Keftiu'; we are no longer dealing with highly civilized Mycenaeans of the Cretan type, but with less cultured warriors, perhaps of the type of the robber-princes who may have heaped up the fastness of Mycenae with the spoil of Cretan cities. The earlier 'Mycenaeans' came to Egypt in the days when the king of Alashiya corresponded amicably with his 'brother' of Egypt, and the king of Yantánay sent great silver vases of the work of Keftiu as his greatest mark of friendship and respect for the ruler of the Nile-land. The resemblance of the Keftiu, whose gold and silver vases were triumphs of Mycenaean art, to the men of Knossos, is not merely fortuitous: these were ambassadors from peaceful Minôan Crete. The Minôan period, the great age of Knossos and Phaistos, was contemporaneous with the great age of Egypt also, the times of the Thothmes and the Ȧmenḥeteps; the later day when the centre of the altered Mycenaean culture had passed from Crete to continental Greece is the time when the peaceful *Keftiu* had passed from the ken of the Egyptians, and, in the days of the degenerate Ramessids of Egypt, their place had been taken by wandering tribes amid whose internecine struggles the older civilization of Greece slowly degenerated and finally passed away.

---

[1] The Egyptian painter has Egyptianized the forms in some measure, but the character of the ornamentation, and its identity with that of the *Bügelkannen* with which these vases are associated, make it very probable that they are carelessly represented Mycenaean *pithoi* but of metal, not of clay.

## XVIIITH DYNASTY OBJECTS FROM MYCENAE.

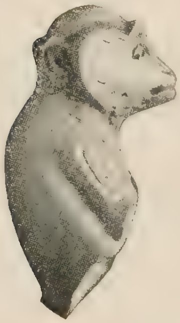
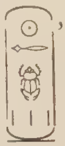


FIG. 13.

An important Egyptian object, hitherto unpublished, was found at Mycenae and is now in the National Museum at Athens, No. 4573. It is the upper part and head of an ape, of blue vitreous composition, bearing on the right shoulder the cartouche of Ȧmenḥetep II., Āa-kheperu-Rā , picked out in yellow (Fig. 13). This is the earliest Egyptian dated object found at Mycenae. It is contemporary: the date is about 1480 B.C.

Another dated object was also found at Mycenae some years ago; it bears the number 2491 in the Athens Museum. This is a small handleless vase of blue glazed faïence with a design of lotus-leaves in alternating dark and light blue glaze, bearing the cartouche of Ȧmenḥetep III. (*circa* 1450 B.C.) in light blue (Figs. 14, 15). This vase was published in the ’Εφημερὶς ’Αρχαιολογικὴ for 1888, p. 156. It is considerably restored, as may be seen from the illustration here given, but the shape is correct; the vase is of a common Egyptian type of the XVIIIth Dynasty. Luckily the greater part of the cartouche has been preserved.

These objects confirm the generally accepted argument for the contemporaneity of the Mycenaean period with the XVIIIth Egyptian Dynasty which has been drawn from the previously known occurrence of objects of Ȧmenḥeteps III. and IV. and Thii from Mycenae and Cyprus.

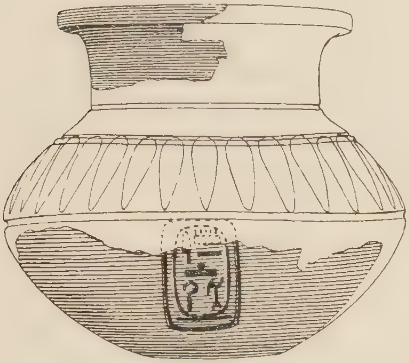


FIG. 14.

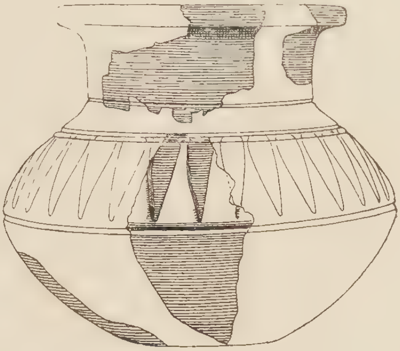


FIG. 15.

I am indebted to M. Tsountas for permission to publish them.

H. R. HALL.

# SCULPTURES FROM CYZICUS.

(PLATES IV.—VI.)

## I.

IN the present paucity of archaic sculpture from Northern Asia Minor (from Cyzicus we have only the beautiful fragment of a chariot relief at Tchinly Kiosk[1]) the much damaged relief of Heracles here reproduced (Plate IV. 1) is not without its value. It was discovered during the demolition of the old Armenian Church at Aidinjik, a village about an hour from Cyzicus, on the mainland west of the isthmus: thanks to Mr. Th. Makrys of Panderma, who providentially brought me to the spot, it has now been removed to the safety of the Imperial Museum.

The dimensions of the slab are about 0·55 × 0·37 metres, and the right edge is preserved: Heracles strides to left, with the left leg foremost; both legs are broken off above the knee: the stump of the left arm shews that it was stretched out horizontally holding the bow, the right being bent behind the head for a blow with the club; the type is in its broad outlines a reproduction of the 'promachos' type used in so many early statues of Zeus, Poseidon, Athena, in fact any of the gods connected with combat; we may quote the Zeus of Ithome, and the Poseidon on coins of Poseidonia. Our Heracles is clothed in a short, sleeveless chiton and the lion skin, which covers the head and hangs below the waist in an undercut fold which probably terminated in the lion's tail: the hairs are indicated by short curved incisions arranged symmetrically in rows. A short sword with a large pommel hangs from a cross-belt at the hero's side.

The face, in spite of the loss of the nose, shews careful modelling:

---

[1] *B.C.H.* xviii. (1884) p. 493; *Catal.* 135.

the eye is, as usual at this date, shewn full face, the lips are rather full and the projecting beard is half-concealed by the left shoulder being thrust forward. The right eye is indicated.

The conventions of the period in the direction of excessive musculature, thickness of limbs, and thinness of waist, are not prominent, and in the head especially, making allowance for mutilation, we recognise a highly finished work of the late sixth century. The relief is simple and rather flat, the turn of the body on the hips to bring forward the left shoulder is in consequence inadequately rendered.

Our nearest parallel in sculpture is the Heracles of the Cnidian Gigantomachy frieze at Delphi, though the face of the latter seems less advanced in style and harder in outline; the Cnidian Heracles strides to right, the right arm is broken off short, and the left hidden, though it was obviously outstretched: the knotted paws of the lion-skin, denoted in our relief by a shapeless mass beneath the arm, appear on his chest. The notion of relief is ultimately the same in both cases, contrasting sharply with the fine archaic relief of Heracles from Thasos now at Tchinly Kiosk,[1] which fades into its background like a bronze repoussé.

In the black figured vases representing Heracles in combat, especially with Geryon, we have the pose and dress repeated again and again. Two amphorae, No. B. 310 in the British Museum (Heracles and Geryon), and No. 1,849 at Berlin (Heracles and the Amazons), are, making due allowance for vase-conventions, almost exact parallels, though the hero turns to the right as usual, instead of to the left.

Heracles is connected with the Cyzicus legend by Apollonius Rhodius, who tells us of his encounter with the giants who tried to block the harbour (*Arg.* i. 989 ff.), while according to the Pseudo-Orpheus (*Arg.* 527) he slew the hero Cyzicus. It is probable, however, that these legends are later in origin than our monument. Of the cult of Heracles our only trace is an ex voto with relief (Michel 1224) which represents him in combat, and dates probably from the third century B.C.[2] He appears frequently on coins, on some of which, dating from Domitian (Mionn. 163, Supp. 213) he is called the founder (*κτίστης*), but Marquardt[3] understands this as merely a compliment to the emperor, who, certainly at Rome, adopted the style of Hercules.[4]

---

[1] *Catal.* No. 133, *B.C.H.* xviii. p. 64, Pl. XVI.

[2] *J.H.S.* xxii. 199.

[3] *Cyzicus*, p. 44.

[4] *Martial*, ix. 64, 65, 101.

## II.

A second archaic fragment of interest is a marble slab (Plate IV. 2) found on the mainland opposite the isthmus, which once formed part of a large heraldic composition of lions and bulls. The slab measures 1·20 metres long, by 0·57 high and 0·26 thick. Though much has been broken away, sufficient remains to shew that the complete work represented the fore-quarters of two kneeling bulls, now headless, facing outwards, surmounted by two large lions, also facing outwards, of which the hind legs and tails are the only surviving portions. The two outer edges are carved, showing the chests and dewlaps of the bulls: the further forelegs, with a corresponding thickness of the slab, have disappeared: the lower edge, which retains its 'bed,' has a small round dowel hole under the centre of the composition. The small surfaces in very low relief immediately above the lions' haunches, seem intended for the backs of the bulls, shewn in rather naïve perspective, receding from the spectator. The surface work is fine in finish, though not minute as to detail: the rendering of the muscles of the lions' legs is summary and conventional. The texture of the bulls' dewlaps is indicated, as in the well known group at Athens, by wavy incised lines. The date of the fragment is probably near the end of the 6th century B.C.

A bull overpowered by a lion is a favourite subject in archaic Greek art, the group at Athens being a conspicuous example in sculpture, and the coin types of Acanthus in numismatics: the type was also a favourite with early gem engravers. The heraldic arrangement has analogies with Mycenaean schemes, and the same principles of symmetrical juxtaposition survive into historic times on coins.

Two imperial coins of Cyzicus, dating from Commodus and Gallienus,[1] shew us a lion-and-bull group which was evidently in the round, as the coins shew different sides of it. In each case the bull falls on his knees with left hind leg extended, the right being doubled beneath him; the head is lifted, and on it rests the left paw of the lion: the right paw is placed on the bull's right shoulder. The nearly upright position of the lion's hind legs, as well as the complete side view of the bull,

---

[2] Berlin Munzkabinet. The latter has a head of Cyzicus on the *obv.* but can be dated by the strategos T. Ἀρ. Παῦλος.

shew that the connection between the coins and our monument is merely superficial.

As to the restoration of the group, I can only suggest that the lions stood with their paws resting on the heads of the bulls somewhat as the lions of Mycenae place their feet upon the altar: the great height of the original composition (for which the position of the lion's legs is sufficient evidence) and the comparative thinness of the block, preclude I think all possibility of its having been a capital: nor can I believe that the group was in the round: the technique is throughout that of relief, and it is difficult to see how the bulls' hindquarters could logically have been treated on the further side.

It is tempting to connect the group with the temple of Adrasteia, which apparently[1] stood opposite Cyzicus: Adrasteia is now generally regarded as a local *Μήτηρ θεῶν*, and *Ταυροκτόνος*, *Ταυροφόνος* is a stock epithet of the lions of Cybele.[2] For the religious connection, we may compare a small relief in the Pergamon Museum at Berlin,[3] which shews an image of Athena flanked by symmetrical groups of lions and bulls.

## III.

The marble statue shown on Plate V. 3 was found by Mr. de Rustafjaell in 1901 at a spot not far from the southern wall of the city, on the top of a low bank of earth, the undergrowth covering all but the back: Mr. de Rustafjaell photographed it in this condition, and it was cleared in 1902.

The figure measures 1·00 metre from the ground to the seat of the throne, and to the shoulder 1·70: the breadth of the shoulders is 0·54, and the extreme depth of the throne back to front 1·00. It was constructed of many pieces of marble dowelled together: of these the head, arms (which were dowelled to the shoulder and to the sides), feet, and much of the throne and footstool have disappeared. Except for a few breakages in the deeply undercut chiton where it falls to the ground, the surface is wonderfully well preserved.

The goddess (for it is evidently a cultus statue) is seated with the left shoulder slightly forward (the left hand may have held some attribute, perhaps a patera) the right arm by the side: the left leg is planted squarely, the right slightly pushed forward, the lost foot having originally projected over the footstool. The dress consists of a long chiton of pleated stuff, girt high with a narrow belt which had once a metal clasp (the dowel hole only remains) and buttoned over the right shoulder; the upper part of the chiton follows the contours of the body, but is coarsely executed and gives no idea of the texture of the stuff or of the flesh beneath; at the feet it falls in small, deeply-cut folds to the ground, spreading out over the footstool and falling down behind it: the effect is florid, perhaps owing partly to the mutilated condition of the extremities of the drapery. Over the knees is thrown a light mantle, which falls on the right side in one broad sweep from the lap to below the knees, and on the left rather more elaborately. Here we have certainly a reminiscence of the great chryselephantine works of the fifth century; the folds are well composed and sharply cut, reminding one rather of the Asclepius reliefs from Epidaurus; the work is far beyond that of other drapery. Around the back of the figure a thin veil is stretched in tight horizontal folds; it originally covered the head. The footstool is in two stages; the upper is surrounded by a moulding, and shews on the right side a crisply executed carving of tendril scroll work, centreing in a pomegranate. Two pinholes in the front suggest that a metal plate, perhaps with a dedicatory inscription, was here affixed. The second stage has also a moulding which was continued round the front on another block projecting beyond the upper stage; this stage also is decorated with a design of tendrils and palmettes on the outer (right) side.

---

[1] Strab. xii. 1. 13. Plut. *Lucull.* 10.

[2] Cf. Soph. *Phil.* 400, *Orph. Hym. in Mat. Deor.* 3, ib. *Hym. in Rheam* 2.

[3] Not yet fully published: an engraving of it forms the Vignette of the Pergamon publications.

The pomegranate makes it probable that the statue represented Kore Soteira, whose cult, as we know from countless coins, as well as other evidence (Marquardt, *Cyzicus*, p. 119 ff.) was, down to late Roman times, among the most important at Cyzicus. The present statue may be referred to Hellenistic times: the scheme of drapery occurs very frequently in the Pergamene frieze, where also the inlaying of projecting portions is extensively practised; the pose is probably derived from the fifth century models, which would naturally still find favour for the representation of the austerer divinities.

## IV.

The stele on Plate V. 4 (in a private house at Aidinjik) was published with its inscription by Lolling in *Ath. Mitth.*, ix. (1884), p. 22, No. 16. It will be seen that his restoration Ἀρι]*αίθους* is contradicted by the stone, but no alternative is obvious. As to the sculpture, though the proportions of the seated figure leave something to be desired, the workmanship is refined and delicate, much better than the average of funeral stelae from Cyzicus, and is perhaps as early as the third century B.C. The diminutive size of the figure holding the fan is due to the well-known convention whereby the relative importance of the figures is thus shown.

## V.

The immense Ionic volute figured on Plate VI. 5 was found by Mr. de Rustafjaell's servant Ali, built into a cistern on the mainland opposite the isthmus. It is of yellowish marble, broken on all sides, and measures, in this condition, some 1·13 metres by 0·50, the thickness being only two or three centimetres. Mr. Henderson assesses the approximate original measurements of the capital as follows: extreme breadth, 2·10 metres (of column, 0·90); depth of volute, 1·05. The latter dimension at once diminishes the importance of the twelve petalled rosette which forms the oculus (and is the chief peculiarity of the volute) to no more than that of the disk, which often occupies this position, and is somewhat similarly treated in an early capital figured in Puchstein, *Das Ionische Kapitell* (Fig. 11, p. 8), and another of obviously later date (Fig. 18, p. 27). With the importance of the rosette vanishes the connection of our fragment with the capital from the old Ephesus temple, now completely restored by Dr. Murray from a few insignificant fragments, where the whole of the volute is occupied by a large rosette. In date the Cyzicus fragment is obviously far removed: the work is extremely coarse, noticeably in the palmette and the proportion of the convex[1] canalis to the moulding which borders it on each side.

I have remarked above on the temple of Adrasteia, opposite Cyzicus, from which the volute may have come. It is unnecessary to suppose a complete order of corresponding dimensions, though that of Ephesus is about half as large again; Mr. Henderson inclines to the belief that the volute comes from an altar, and is consequently rather decorative than strictly architectural; the general flatness of the relief is in favour of such a theory.

---

[1] This is also a peculiarity found in the Ephesus temple *J.H.S.* x. 9.

## VI.

Fragments of two other curious volutes (Plate VI. 6) of coarse-grained yellowish marble were found by me in 1901, built into one of the loose stone walls which terrace the slope of the acropolis on the outer side of its eastern wall. In 1902 Mr. Henderson and I found in the same neighbourhood a very plain cornice of similar material and style, consisting of two flat fillets joined by a cyma,[1] and a base which, being of different marble, probably does not belong.

The volute measured 0·385 m. across, the pulvinar the same (the latter in its narrowest part has a diameter of 0·28 m.); the column with its echinus measured 0·36 across. The single bead marking the limits of the slightly convex canalis terminates in a convex disk with a small button in the centre.

The peculiarities of the fragment are: (1) the size of the volute as compared with the width of the pulvinar and the diameter of the column—the latter is a well-known characteristic of early Ionic—and (2) the excessive plainness of the design, which is almost without parallel: in particular the concave pulvinar, so richly adorned at Ephesus, is left quite bare.[2] The workmanship, however, is good and delicate, contrasting with the coarseness of the large volute described above. I should be inclined to date these fragments at least as early as the Ephesus temple, where the classical form of the capital is nearly attained, and the volute approximates to its later proportions.

F. W. HASLUCK.

---

[1] The height of this member is 0·23 m., and its projection 0·19; the under side is roughly hollowed.

[2] *Cf.* Puchstein *op. cit.* fig. 9, p. 12, an early *poros* capital from the Acropolis.

# SOME UNPUBLISHED
# 'CATALOGI PATERARUM ARGENTEARUM.'

By the kind permission of Mr. Leonardos I am enabled to publish the following inscriptions, all of which are in the Epigraphic Museum at Athens. They belong to the class of 'Catalogi Paterarum Argentearum,' of which the already published inscriptions are collected in the *Corpus Inscriptionum Atticarum*, Vol. II., Pt. 2, Nos. 768–776, 776 b; Vol. IV., Pt. 2, Nos. 768 b–776 c (pp. 187–192).

I have looked in vain for any indication of the places at which Nos. II., V., and VII. were found, but as all[1] the other members of the series were discovered on the Acropolis, it is safe to infer the same for these three fragments also.

My warmest thanks are due to Dr. Adolf Wilhelm, who, besides in the first instance calling my attention to these inscriptions, has kindly given me valuable assistance in several points of reading and interpretation.

As but one account of the 'Catalogi Paterarum Argentearum' has, so far as I am aware, appeared in English,[2] and that one is not very widely accessible, I may be allowed by way of preface briefly to resume what is known of this interesting class of inscriptions.[3]

They have reached us, unfortunately, in a very fragmentary form: the stones on which they occur are evidently portions of large stelae, of which there must have been several; how many it is not possible to determine. The writing, which varies very greatly in merit, is in all cases small and abounding in abbreviations: sometimes it is very difficult to decipher, owing partly to careless execution, partly to the state of preservation of the stones themselves. The general character of the letters dates the inscriptions to the latter part of the fourth century, B.C. When we turn to their contents, we find that they consist of lists, whose items follow a regular formula of the type: *Πολύτιμος ἐν Κολλυτῷ οἰκῶν σκυτοτόμος ἀποφυγὼν Καλλίαν Καλλιάδου Παιανιέα φιάλην σταθμόν*: Η. The last three words make it plain that we have to deal with dedications, and an examination of the inscriptions shows that these dedications are unvarying not only in form, always consisting of a *φιάλη*,[1] but also in weight, each one weighing a hundred drachmas. The names of the dedicators stand in the nominative, and it needs but a glance at the list to convince us that we have to deal not with free Athenian citizens, but with slaves, or, at any rate, those of servile origin. No other supposition will account for names such as *Σωτηρίς*, *Εὐτυχίς*, *Μάνης*, *Σωσίας*, *Συνέτη*, *Πλίννα*, *Ἀρμένιος*, *Θρᾷττα*, *Ὀνησίμη*, *Ἑλλάς*, to quote but a few instances. The second item in the formula, however, proves that these persons are no longer slaves: throughout these inscriptions the words *οἰκῶν ἐν* followed by a local name (in almost every case that of an Attic deme) come immediately after the dedicators' names, and this betokens that they are in fact metics. This is followed in turn by a word denoting some trade or employment, partly, no doubt, to aid identification and make up for the absence of the patronymic. Of these trade-names we shall have something to say later: at present we may remark that they are usually, but not invariably present, and that they sometimes precede, sometimes follow, the deme of residence. We have, next, the word *ἀποφυγών*[2]: in it we must certainly see a legal significance, that, namely, of acquittal in a trial. The accusative which follows gives the name of the plaintiff, and it is here that the greatest variety meets us: usually we have the name of a citizen with patronymic and demotic, though in two inscriptions the patronymic is lacking. But we have also metics, *ἰσοτελεῖς*, *πρόξενοι*, Olynthians, a Trozenian and a Theban[1] appearing as accusers: we find, again, two or even three names conjoined, in one case a ward with his guardian, sometimes two brothers, or father and son, &c.; or we have the name of a citizen or metic in conjunction with a *κοινὸν ἐρανιστῶν*.[2]

---

[1] All, that is, of whose provenance we have information: *i.e.*, Nos. III. (IV.) and VI. in the present series, and all in the *C.I.A.* exc. Nos. 774–776, whose locality is unknown, and No. 771b, described as 'Athenis repertum.'

[2] C. D. Buck, 'Inscriptions found upon the Akropolis' in the *American Journal of Archaeology*, iv. 1888 p. 149 foll.

[3] See M. Clerc, *Les Métèques Athéniens*, Paris, 1893 p. 288 foll.; G. Foucart, *De libertorum conditione apud Athenienses*, Paris, 1896, p. 61 foll.; V. Thumser, '*Lehrbuch der griechischen Staatsaltertümer*' in K. F. Hermann's *Lehrbuch der griechischen Antiquitäten*, Vol. 1 part 2, (sixth edition, Freiburg i. B. 1892), p. 418 foll.

---

[1] Pollux I. 28 τὰ δ' ἀναθήματα ὡς ἐπὶ τὸ πολὺ στέφανοι, φιάλαι, ἐκπώματα, κτλ. Cf. Wallon, *Mém. de l'acad. des inscr.* xix. 2 p. 274 foll. Φιάλαι are shallow circular vessels, without handles and usually without bases, used chiefly for drinking and libations.

[2] In a few inscriptions of this class ἀπέφυγε takes the place of ἀποφυγών and the words φιάλην σταθμόν: Η are wanting; we must suppose that in these the reference to the φιάλη was included in the heading.

There is, however, a number of inscriptions which show a remarkable variation amounting to a complete reversal of the formula. In them the word *ἀποφυγών* is altogether lacking, the citizen's name appears in the nominative, that of the metic-freedman in the accusative. Thus we have, for example, *Λυσιάδης Χίωνος Ἀλωπεκῆθεν Σωστράτην ταλασιουργὸν ἐμ Μελίτῃ οἰκοῦσαν φιάλην*: H.

So much the inscriptions themselves told; how was their import interpreted? Pittakis,[3] who edited the first stone of this class to be discovered, made no attempt to explain it. Rangabé[4] rightly saw that the dedication was the result of an acquittal in some trial: further he did not go. Curtius[5] was the first to insist on the servile origin of those who bore such names as we above noticed, but abandoning the legal sense of *ἀποφυγών* he interpreted the dedications as made by runaway slaves who found asylum in a temple and received freedom on condition of offering this votive *φιάλη*. Wallon[6] rightly points out the untenability of this theory as involving a right of asylum amounting to an abolition of slavery: his own interpretation, however, according to which the *φιάλη* is the price paid for asylum granted while the slave demands his sale to another master (*πρᾶσιν αἰτεῖσθαι*), is hardly more satisfactory. A step forward was made by Köhler[7] who identified these votive cups with the silver *φιάλαι ἐξελευθερικαί* mentioned in a fragment of the accounts inscribed by the Treasurers of Athena, which Köhler first published. But neglecting the legal bearing of the word *ἀποφυγών* he thought that we have here simply a thank-offering made in accordance with law or custom by each freedman after his manumission. Schenkl[1] returned to the true meaning of *ἀποφυγών*, believing that usage compelled metics to dedicate a cup of certain value after acquittal in the law courts: in a later article,[2] however, he gave the true explanation—that these *φιάλαι* were dedicated after acquittal in an action *ἀποστασίου*. And, in fact, a stone of this class had been published[3] in 1879 by Koumanoudes containing part of the heading of one of these inscriptions, reading

---

[1] See note on Insc. III. col. iii. l. 2.

[2] Lüders, *Die dionys. Künstler*, p. 47; Ziebarth, *Das griechische Vereinswesen*, pp. 35 f., 135 f.

[3] Ἐφ. Ἀρχ. 124 (1839).

[4] *Antiq. Hell.* 234, 881, 882.

[5] *Inscr. Att. nuper repertae duodecim*, p. 19 (1843).

[6] *Mémoires de l'acad. des inscr. et belles-lettres* xix. 2 p. 266 foll. (1853). This article appears to have escaped the notice of M. Clerc and M. Foucart.

[7] *Mittheilungen aus Athen*, III. (1878), p. 172 foll.

*-τος Δημοτέλους τοῦ Ἀντιμάχου Ἀλ-*
*-οστασίου ἑκατονβαιῶνος π[έμπτ]ει ἐπὶ [δ]έκ[α]*

The restoration[4] of *πολεμαρχοῦν]τος* in the first line, and of *δίκαι ἀπ]οστασίου* in the second is no longer open to doubt.[5]

The freedman in Attica occupied in general the position of a metic; but he stood at the same time in a special relation to his former master. We have no means of ascertaining exactly what his duties were, save that he was obliged to have his former master as patron (*προστάτης*). For the rest, the duties required probably varied from case to case, being in part at least the result of a compact made at the time of manumission. For a breach of any of these duties the patron could bring against the freedman a *δίκη ἀποστασίου*:[6] if the freedman lost, he returned into a state of servitude; if he was acquitted, he was freed for ever from all duties to his former master, and became a free metic.

We see, then, that the metics who dedicated, whether in deference to law or to custom, the *φιάλαι ἐξελευθερικαί* had been accused by their patrons of failing to perform their duty to them. They had been acquitted, and were now metics pure and simple, having the privilege of free-born metics, that of choosing their own patrons.[7]

---

[1] *Wiener Studien*, 1880, p. 213—218.

[2] *Zeitschr. f. oe terr. Gymn.* 1881, p. 167 foll.

[3] Ἀθηναῖον VIII. 528 (= *C.I.A.* ii. 2. 776).

[4] Wilamowitz-Moellendorff in *Hermes* xxii. (1887), p. 110.

[5] Köhler indeed in editing the *Corpus Insc. Attic.* still hesitated: but the difficulty he felt about accepting Schenkl's explanation (cf. Lipsius in Meier-Schömann–Lipsius 621, note 373) rests upon the assumption that the δίκη ἀποστασίου can only be brought if a freedman enrols himself under a patron (προστάτης) other than his former master. In reality it covers a much wider field. Cf. also Clerc, *op. cit.* 292.

[6] Harpocr. ἀποστασίου δίκη τίς ἐστι κατὰ τῶν ἀπελευθερωθέντων δεδομένη τοῖς ἀπελευθερώσασιν, ἐὰν ἀφιστῶνταί τι ἀπ᾽ αὐτῶν ἢ ἕτερον ἐπιγράφωνται προστάτην καὶ ἃ κελεύουσιν οἱ νόμοι μὴ ποιῶσιν· καὶ τοὺς μὲν ἁλόντας δεῖ δούλους εἶναι, τοὺς δὲ νικήσαντας τελέως ἤδη ἐλευθέρους. Cf. Thumser, *loc. cit.* p. 418, n. 6.

[7] Such appears to me one of the natural results of an acquittal in a δίκη ἀποστασίου. I do not quite understand M. Th. Reinach's difficulty in accepting the statement that 'l'affranchi vainqueur dans la δίκη ἀποστασίου choisissait désormais librement son patron' (*Rev. Ét. Gr.* x. 111).

Can we explain the curious reversal of the formula which, as we saw, appears in some inscriptions? Köhler attributed it to carelessness on the part of the stone-cutter; but such a theory, improbable in itself, has been quite put out of court by the number of stones which have been discovered showing this peculiarity.

Wilamowitz[1] suggested that in these cases the patrons won their suits, and that we might therefore supply the legal term corresponding to *ἀποφυγών*, namely *ἑλών*. Though he himself rejected this explanation in favour of another which seems to have far less probability,[2] the suggestion has been adopted by Thumser,[3] and it has been maintained afresh by G. Foucart.[4] To me it appears a perfectly rational and sufficient solution of the problem.

The question has been raised why the successful party in the suit *ἀποστασίου* should have had to pay a tax of a silver phiale to the treasury of Athena. No completely satisfactory answer has been given. It has been suggested that the patron, if successful, paid the hundred silver drachmas to indemnify the State for the loss of the *μετοίκιον* of the convicted: but why, then, should the metics, if acquitted, pay a similar tax? Others[5] say that the stake was so great that the custom arose, perhaps enforced afterwards by a decree, of dedicating a cup to Athena as a thank-offering for success. For the freedman the stake was undoubtedly immense: freedom and slavery hung in the balance. But to the patron the matter was not usually one of such moment as that his success should cause him any overwhelming thankfulness to Providence.

Taking into consideration the manumissions known to us from Thessaly,[6] where the liberated slaves had to make a payment of 15 staters to the Treasury, I am inclined to believe that the *φιάλη* was, to all intents and purposes, a registration fee paid to secure the inscription in a public place of the result of the trial. In Thessaly the tax was paid immediately on manumission, and twice a year a proclamation was made of the names of those who had paid the tax, which were afterwards inscribed in the public accounts and served as an incontestable proof of the freedman's status. In Athens there was no fixed form of manumission, and difficulties were constantly arising as to the real status of persons who claim to be free: once the matter had been decided, and the result inscribed on the accounts of the treasurers of Athena there could be for the future no doubt and no dispute. This is not to deny that the dedication was enforced by law: its uniformity requires, I believe, something more than custom to account for it: but the state as well as the individual was interested in getting an official list of those who had been condemned to slavery again, and those whose trial had resulted in their liberation from all duties to their former masters. And so it may well be, as Mr. Bosanquet has suggested to me, that the action was not in all cases a *bona fide* one, that sometimes it took place by collusion. A master could reward a faithful slave by manumission, a patron could likewise reward a faithful freedman by liberating him from all ties and duties to himself, but in order that this might be done officially, publicly, and definitely, so that after the patron's death no dispute could arise, the action may sometimes have taken the form of a *δίκη ἀποστασίου*,[1] the freedman being acquitted by collusion of his patron.

---

[1] *Hermes* xxii. p. 110, n. 1.

[2] Ἐξελόμενος εἰς ἐλευθερίαν. See Thumser, *l.c.*; Wachsmuth, *Stadt Athen*, ii. 1. 151, n. 2.

[3] Thumser, *l.c.*, 418 n. 7.

[4] G. Foucart, *op. cit.* 64 foll. M. Foucart appears to have arrived at this result independently of Wilamowitz-Moellendorff and Thumser, since he does not refer to their works.

[5] G. Foucart, p. 76, and others.

[6] *Bull. de Corr. Hell.* 1887, p. 364, foll.

But the interest of these inscriptions is not exhausted when we have arrived at an understanding of their legal import. As above remarked, to the name of the freedman is appended not only his deme of residence, but also, in most cases, the occupation in which he is engaged. We are thus brought face to face with a series of trades and manufactures, in conjunction with the demes in which they were carried on, a series which, it is almost needless to add, is of the utmost value for the history of ancient Athens on that side where early literary evidence is most deficient. If we are to obtain any adequate idea of the life of the Athenians, we must turn aside now and again from the discussions of Council and Assembly, from the clash of arms and the wordy warfare of the Law Court, and visit the quays of the Peiraeus where the merchant awaits the ships which bring his wares from East and from West, or the Market Place with its array of booths filled with the multifarious goods of the retail dealers, or the workshops in which are produced the various articles demanded by necessity or luxury. To some this may seem little short of sacrilege: accustomed to move in the semi-ideal atmosphere of Greek philosophy, Greek literature, Greek art, they may refuse to descend to the grosser air of the Market Place, or to allow their eyes to rest on its commonplace and often sordid sights, and their ears to be filled with its inharmonious din. But surely the ultimate gain more than outweighs the temporary sense of loss. We may lose our ethereal city, the product of our dreams, but we gain the city of fact and of history, and, above all, we bridge over the chasm which so often seems to separate a real present from an idealized past, and feel the continuity that exists between the two, feel that the ancients were after all men of the same stuff as we ourselves. I need therefore offer no apology for reviewing in a few sentences the trades and callings mentioned in the class of inscriptions which we are at present discussing.[1]

---

[1] Like Clerc (*op. cit.* p. 290) I am unable to understand Wachsmuth's note (*Stadt Athen*, ii. 151 n. 2): since, however, he speaks of a 'Freilassung durch Loskauf, die vor Gericht in Form einer δίκη ἀποστασίου erfolgte' there may be some reference to a theory such as I have above stated.

We may begin our survey with the industrial, or manufacturing classes. Of workers in metal we find in our inscriptions two goldsmiths (*χρυσοχόοι*[2]), both resident in Kydathenaion, and a blacksmith (*χαλκεύς*[3]) in Peiraeus. More interesting are the two engravers of gems to be set in rings (*δακτυλιογλύφοι*[4]), who both reside in Melite, a deme contiguous to Kydathenaion.

Turning next to those engaged in the leather industry, we may distinguish two classes. Firstly, there were the tanners (*βυρσοδέψαι*,[5] *σκυλοδέψοι*[6]), and, secondly, there were those who dealt with the leather these produced. Of the latter class our inscriptions bring before us a number of saddlers (*σκυτοτόμοι*[1]) two bootmakers (*ὑποδηματοποιοί*[2]) and a female cobbler (*νευροράφος*[3]). It is worth remarking that one of the tanners is a resident in Kydathenaion, where we know[4] that Kleon's tannery was situated, and though the location of the other is unknown, a probable conjecture[5] places it in the same deme: certainly his former master was a metic resident in Kydathenaion. In the neighbouring deme of Melite we find two, if not three, of the saddlers, and also one of the bootmakers, while two of the former lived in Skambonidai, as well as the cobbler. I have rendered the word *σκυτοτόμος* 'saddler' although in the classical literature it seems to bear more frequently the meaning 'shoemaker'[6] and may well be used in the same sense here, because it seems more probable that here the word bears the wider meaning of 'leather-worker' (perhaps including also the making of shoes) as distinguished from the more restricted term *ὑποδηματοποιός*. It is interesting to find this latter word used in the fourth century, B.C., for hitherto it has not been known earlier than the writings of Chrysostom, towards the close of the fourth century of our era. The modern Athenian bootmaker over whose shop figures the legend ΥΠΟΔΗΜΑΤΟΠΟΙΟΣ is to be congratulated on thus at one stroke adding seven centuries to his pedigree!

---

[1] Besides the well-known works of Büchsenschütz, *Besitz und Erwerb im Griechischen Alterthume* Halle, 1869; and Blümner, *Technologie und Terminologie der Gewerbe und Künste bei Griechen und Römern*, 4 vols. Leipzig, 1875–1887, I may specially mention G. Scherling, *Quibus rebus singulorum Atticae pagorum incolae operam dederint* in Vol. xviii. of *Leipziger Studien für Classisschen Philologie*,, Leipzig, 1897, and the Appendix to Clerc, *op. cit.* p. 450. Clerc, Book III. sect. ii. pp. 387 foll. should also be consulted.

[2] Aristoph. *Lys.* 408; Demosth. *in Meid.* 23 foll.

[3] Arist. *Poet.* 26. 21 χαλκέας (φάσιν εἶναι) τοὺς τὸν σίδηρον ἐργαζομένους. Hesych. χαλκεύς· πᾶς τεχνίτης, καὶ ὁ ἀργυροκόπος, καὶ ὁ χρυσοχόος. In *Od.* 3. 432 χαλκεύς = χρυσοχόος (cf. l. 425); and in *Od.* 9. 391 it = 'worker in iron' (cf. l. 393).

[4] See note on the inscription published below, No. III. col. ii. l. 14.

[5] Aristoph. *Eq.* 44 ἐπρίατο δοῦλον, βυρσοδέψην Παφλαγόνα. *Nub.* 581 (the reference in the Thesaurus to *Eq.* 447 is an error); cf. *Plut.* 167, *Pax* 753. These passages, amongst many, show in what repute tanners were held by the Athenians.

[6] Σκυλόδεψος occurs in [Dem.] xxv. 781. 18; the edd. restore it in Hesych. (*s.v.*) for the MS. σκυλοδέψιος. More common is σκυλοδέψης, *e.g.* Aristoph. *Av.* 490 χαλκῆς, κεραμῆς, σκυλοδέψαι, σκυτῆς, βαλανῆς, κ.τ.λ.; *Eccl.* 420. Eustath. quotes by-forms σκυλάδεψος, σκυλαδέψης.

Of workers in wood our inscriptions give us but one example, a 'couch-maker' or upholsterer (*κλινοποιός*[7]), living in Kollytos. It is when we come to the woollen industry that we find the occupation which predominates. We have no less than thirty-three, possibly thirty-four 'wool-workers' (*ταλασιουργοί*[8]), all of them women, scattered over a wide area. The largest number is claimed by Melite (6), Kydathenaion (5, ? 6) and Peiraeus (5); but we find instances also in the suburban demes of Alopeke and Keiriadai, and in the country at Thorikos, Iphistiadai, and Kephisia. These latter doubtless spun the wool on the spot where it was produced, and it is worth noting that the patrons of those who lived in the city belonged in many cases to country demes, Perithoidai, Halai, Lamptrai (2), Gargettos, etc., where in all probability they owned flocks of sheep whose wool was spun by their freed-women living for the most part, as we have seen, in the City or in Peiraeus.

---

[1] *Il.* 7. 221; Plato, *Resp.* x. 601C; Xen. *Hell.* iii. 4. 17; *Cyrop.* vi. 2. 37; and cf. below, note 6.

[2] See note on inscription III. iii. 4. Ὑποδηματάριος occurs in Curtius *Inscrr. Att.* p. 32, n. 192. 8, ὑποδηματορράφος in Arcadius, p. 84. 26; Synes. p. 117.

[3] Arist. *Eq.* 739, νευρορράφοις καὶ σκυτοτόμοις καὶ βυρσοπώλαισιν. Plato *Resp.* iv. 421A speaks of them with contempt; cf. Themist. *in Sophista*, p. 263B. Another sense of the word is given by Schol. Plat. ad *l.c.* p. 402 Νευρορράφους εἶπε Λυκοῦργος τοὺς τὰ νεῦρα ῥάπτοντας ταῖς λύραις. The word has not hitherto been known in the feminine.

[4] Kirchner, *Hermes* xxxi. p. 254.

[5] Scherling, *op. cit*, p. 39.

[6] Aristoph. *Lys.* 414, 416: *Eccl.* 385; Plato, *Gorg.* 447D, 490E, etc.; Aristot. *Eth. Nic.* I. 1101A 4; Pollux vii. 80.

[7] See note on inscription III. ii. 21, and add Pollux vii. 111. Kollytos seems to have been the centre of the wood-working industry; see Scherling *op. cit*, p. 48.

[8] There does not seem to be any warrant for confining the word (as L. and S.) to spinning: it probably includes carding, spinning, and weaving (cf. Bekker, *Anecd. Gr.* ταλασιουργοί· οἱ ἱστουργοί). The woollen manufacture was considered as belonging naturally, we might almost say essentially, to the women; see Plato, *Ion* 540C; but especially Suid. *s.v.* ταλασιουργία.

Agriculture is represented by eight farmers (γεωργοί), or, as we should probably more correctly render the word 'farm hands,' and one vine-dresser (ἀμπελουργός[1]). The latter is found in Oe, which lay to the North of the modern Pass of Daphni by which the Sacred Way passes from the Attic to the Thriasian Plain: those of the former whose demes we know belong to Skambonidai, Phaleron, Iphistiadai, Salamis,[2] Hagnus, and Kolonos. Except Skambonidai and Kolonos, these are, as we should have expected *a priori*, country demes: Hagnus lay in the plain of the Mesogeia, Iphistiadai at the upper end of the plain of Athens, not far from the modern Kephisia: in it Plato[3] owned a plot of land, as also in Eiresidai, the deme of Praxiteles,[4] which probably lay immediately to the West of it. Skambonidai lay on the outskirts of the City, in all probability[5] on the Sacred Way, and Kolonos was famous for its groves and gardens, immortalized by Sophocles' exquisite description.[6]

From agriculture we turn to trade. We find two merchants (ἔμποροι[7]) both living in Peiraeus; doubtless they were engaged in the import trade which was of such vital moment to Attica. As distinguished from these importers and wholesale merchants, we have a large number of retailers, who bought from them to sell in turn to the public. Most of them, we may believe, had stalls in the Market or in the neighbouring Theseion, where they displayed their wares; others lived in Peiraeus, where there was a large population and doubtless a brisk trade. These dealers include a considerable number of women, though men are in a slight majority, and live almost exclusively in Melite, Alopeke, and Peiraeus. Some are marked simply by the term retailer (κάπηλος,[1] καπηλίς[2]): others have a more definite description. Thus we have an ironmonger (σιδηροπώλης[3]), a baker (ἀρτοπώλης[4]), a dried-fish seller (ταριχοπώλης[5]), a greengrocer (ὀσπριοπώλης), three sellers of sesame (σησαμοπώλης, -ις[6]), three of frankincense (λιβανωτοπώλης,[7] -ις), and two sellers of hemp, or, possibly, of hempen cloth (στυππειοπώλης,[8] -ις). In all these dealers number nineteen, or possibly twenty, of whom six reside in Melite, four in Alopeke, and three, or perhaps four, in Peiraeus: four are of unknown residence, and the remaining two belong to Kollytos.

---

[1] Aristoph. *Pax*, 190.
[2] G. Foucart, *op. cit.* p. 52.
[3] Diog. Laert. iii. 41.
[4] Loewy, *Insch. griech. Bildhauer*, note to No. 537.
[5] Scherling, *op. cit.* p. 41, foll.
[6] *Oed. Col.* 16 foll., 58 foll., 668 foll.
[7] Plato, *Resp.* ii. 371D; cf. Schol. Aristoph. *Pl.* 521, and the following note.

The Comedians, thanks largely to Athenaeus, and the Orators have left us a sufficiently clear picture of the Athenian Agora, a picture abounding in life and activity and marked by countless touches which bring home to us the fact that here at any rate there is no great difference between ancient times and our own day. As we read we cannot but be struck by the resemblance borne by the picture to the scenes we have witnessed in the market places of some of the larger continental towns of to-day. We see the busy throng of buyers, mostly citizens, or slaves specially detailed for the work,[9]—women are rare among them—going the round of the stalls to make their purchases, assailed by the cries of the vendors. To carry parcels home oneself was considered a mark of dire poverty or else of extreme miserliness[10]; they were usually handed over to the errand boys standing ready to carry them to the purchaser's house;

---

[1] Plato, *Polit.* 290A, *Protag.* 313C. Metaphorically in [Dem.] xxv. 57, p. 784 κάπηλος πονηρίας καὶ παλιγκάπηλος καὶ μεταβολεύς. The contrast between κάπηλοι and ἔμποροι is emphasised in Plato, *Resp.* ii. 371D καπήλους καλοῦμεν τοὺς πρὸς ὠνήν τε καὶ πρᾶσιν διακονοῦντας ἱδρυμένους ἐν ἀγορᾷ, τοὺς δὲ πλανήτας ἐπὶ τὰς πόλεις ἐμπόρους. The κάπηλοι are spoken of in the preceding paragraph as σχεδόν τι οἱ ἀσθενέστατοι τὰ σώματα καὶ ἀχρεῖοί τι ἄλλο ἔργον πράττειν.

[2] Aristoph. *Thesm.* 347; *Plut.* 435, 1120.

[3] Pollux vii. 196.

[4] Pollux vii. 21; Hesych. *s.v.* Πάσανος. The bread seems usually to have been sold by women; see, *e.g.* Aristoph. *Vesp.* 238; *Ran.* 858.

[5] Plut. *Mor.* 631D; Lucian, *Vitt. auct.* c. 11; Pollux vii. 27. Blümner, *Griech. Privataltert h.* p. 227, note 1, in K. F. Hermann's *Lehrbuch.*

[6] C. Scherling, *op. cit.* p. 30; neither the masc. nor the fem. form occurs in the *Thesaurus.*

[7] Cratin. *ap.* Athen. xiv. 661E; Pollux vii. 196.

[8] Aristoph. *Eq.* 129 and Schol. Pollux vii. 72.

[9] Ἀγοραστής (Pollux iii. 126; Athen. iv. 171A), or ὀψώνης. For this account of the Athenian Agora, I am indebted chiefly to the excellent chapter in Wachsmuth, *Die Stadt Athen im Alterthum*, Leipzig, 1890, Vol. II. part 1, pages 443 foll.

[10] Theophr. *Charact.* 22.

in ancient Athens these were called *προὔνεικοι*,[1] to-day we call them *λοῦστροι*; it is but a difference of name. But the crowd in the Agora did not consist merely, or even chiefly, of active purchasers. It was the common meeting-place for all who had no special engagement to keep them elsewhere. There the news of the day, political or other, was discussed: public and private announcements were made; and crowds of idle loungers stood by the stalls and watched sellers and buyers. There was also a number of buffoons, beggars, and sycophants—the busiest of that motley crowd. From nine in the morning until noon the market was at its fullest, but the vendors sat there from early morning until sundown,[2] and even when trade was slack there would be those in the Agora who took their daily 'constitutional' here.[3] The booths of the hawkers must have been very similar to the corresponding structures of to day, and in them were displayed most of the various wares of the market-place: only flour was an exception in early times, being sold in the Flour Exchange (*ἀλφιτόπωλις*) built at least as early as 389 B.C.[4] The smaller traders contented themselves with a table or tray on which to set forth their goods, while they themselves sat by under their sun-umbrellas.[5] Each class of merchandise had its own particular location (*κύκλος*)[6] in the Market, called by the name of the ware sold there. Thus we find *ὁ ἄρτος* and *οἱ ἰχθύες*,[7] in which circles we may probably place the *ἀρτοπώλης* and the *ταριχοπώλης* of our inscriptions. There was further the meat-market (*τὰ κρέα*) and the poultry-market (*οἱ ὄρνιθες*).[8] The poorer classes frequented in large numbers the vegetable-market (*τὰ λάχανα*),[9] where doubtless our greengrocer as well as the three sesame-dealers had their stands: sesame, indeed, seems to have had a special corner of the vegetable-ring to itself.[1] Before passing on from those who dealt in these various victuals, we must cast a glance at the sellers of hot food, especially at the cook-shops (*μαγειρεῖα*)[2] which were to be found in the Agora: perhaps the two cooks (*μάγειροι*) who occur in our inscriptions kept small restaurants of this class: on the other hand, it is possible that they were in domestic service, or that they were of the number of the professional cooks who had a stand in the Market where they were hired by those who wished to give fashionable dinners.[3] Near the cooks stood the flute-players (*αὐλητρίδες*),[4] also waiting to be hired for entertainments, and with them may have been found the freedwoman who is described as a *κιθαρῳδός*, though her residence in Epikephisia speaks against rather than for this supposition.

---

[1] Hesych. *s.v.* *προυνικοί*, Pollux vii. 132, from which passages we learn that they were also called *Βυζάντιοι* and *παιδαρίωνες*. Wachsmuth *l.c.* 456, n. 1.

[2] Wachsmuth, *l.c.* 451, n. 5.

[3] Demosth. liv. 10, p. 1258. 21 (Ariston speaks) *περιπατοῦντος, ὥσπερ εἰώθειν, ἑσπέρας ἐν ἀγορᾷ μου μετὰ Φανοστράτου.* [Plut.] *Vit. X orat.* 9, p. 849E (Hypereides) *ἐποιεῖτο τὸν περίπατον ἐν τῇ ἰχθυοπώλιδι ὁσημέραι ἑωθινός* [cod. *ὡς εἰκός*]. Athen. viii. 342C *Ἕρμιππος δέ φησιν...ἑωθινὸν τὸν Ὑπερείδην ποιεῖσθαι νῦν τοὺς περιπάτους ἐν τοῖς ἰχθύσι.*

[4] It is mentioned in Aristoph. *Eccl.* 686.

[5] Athen. xiii. 612A.

[6] Pollux x. 18 *ἵνα δ' ἐπιπράσκετο τὰ σκεύη, τῆς ἀγορᾶς τὸ μέρος τοῦτο κύκλοι ὀνομάζοντο, κ.τ.λ.* (Pollux proceeds to quote Diphilos and Alexis); Hesych. *s.v.*; Wachsmuth *l.c.* 462. Plato adopts this arrangement in *Leges* ix. 849E, and xi. 915D.

[7] *E.g.* Aristoph. *Vesp.* 789; Antiphanes *ap.* Athen. vii. 287E; Alexis *ap.* Athen. iii. 104D.

[8] Dem. *De fals. leg.* xix. 272, p. 417. Aristoph. *Av.* 13 *οὐκ τῶν ὀρνέων* and Schol. *ad. loc.* (Rutherford, *Schol. Aristoph.* i. 427. 8).

[9] Aristoph. *Lys.* 557; Alexis *ap.* Athen. viii. 338E; Diphilos *ap.* Athen. vi. 227E.

The perfume-market (*τὰ ἀρώματα*)[5] was largely frequented by the young swells, who often squandered large sums there: a special department of this was the place where frankincense was sold (*ὁ λιβανωτός*).[6] In our inscriptions we find a woman engaged in this trade (*λιβανωτόπωλις*) resident close to the Market, in Melite, a man in Peiraeus, and a third frankincense-seller of uncertain deme.

Further there was the wool-market, where perhaps some of the *ταλασιουργοί* of whom we have spoken sold their own productions; there was the clothes bazaar,[7] the pottery-market (*αἱ χύτραι*),[8] and the metal-market (*τὰ χαλκᾶ*),[9] where in all likelihood our *σιδηροπώλης* is to be sought. Before leaving the *ἀγορά* we must notice the slave-market (*τὰ ἀνδράποδα*),[10] where the dealers exhibited their human wares, and the book-stalls set up on the 'orchestra,' the raised space around the statues of Harmodios and Aristogeiton.[1] We have referred above to those who are denominated simply *κάπηλοι-ίδες*: it is possible that these kept the wine-shops in or near the Agora and in Peiraeus,—the word can certainly bear such a meaning[2]: but it is more probable that the *κάπηλος* was the ancient counterpart of the modern *bakalis*, whose shop, a blend of a grocery store with an eating and drinking house, bears the delightfully comprehensive name of *παντοπωλεῖον*. Finally we may notice the barber (*κουρεύς*)[3] given us by the inscriptions published below: his residence is probably Melite.

---

[1] Moeris *s.v.* *σήσαμα*.

[2] Wachsmuth *l.c.* 483. Pollux ix. 48 explains the word differently, as the places where cooks were hired.

[3] Cf. Plaut. *Aulul.* 280 f. postquam obsonavit erus et conduxit coquos | tibicinasque has apud forum. Wachsmuth, *l.c.* 491; Becker, Charikles ii. 318 foll.

[4] Plaut. *loc. cit.*; Theophylact. *Ep.* 12; Theophr. *Char.* 11.

[5] Pollux ix. 47 (quoting Eupolis) *περιῆλθον εἰς τὰ σκόροδα καὶ τὰ κρόμμυα | καὶ τὸν λιβανωτόν, κεὐθὺ τῶν ἀρωμάτων.* Athenaeus xv. 691C.

[6] Athen. ix. 374B. Pollux *l.c.*

[7] Pollux vii. 78 *ἐκαλεῖτο δέ τις Ἀθήνησιν ἱματιόπωλις ἀγορά.* According to an almost certain restoration of Wilamowitz-Moellendorff, we have in *C.I.A.* ii. 772B 2 [ἀ]*κέστριαν* (female tailor) a word which occurs in Lucian, *Rhet. Praec.* 24.

[8] Pollux ix. 47; Aristoph. *Lys.* 557.

[9] Bekker, *Anecdota Graeca* i. 316. 23. Wachsmuth, *op. cit.* i. 180,

[10] Pollux x. 19. Wachsmuth, *l.c.* 462, n. 2, 490, n. 2.

The wants of a great city necessitate a large amount of transport, which gives employment to a considerable number of men, especially where our modern transport facilities are unknown. We are thus prepared to find in our inscriptions two muleteers (*ὀρεωκόμοι*[4]), one in Lakiadai, a deme on the Eleusis road famed for its gardens, amongst which were those of Kimon, and for its unrivalled radishes; the other in Peiraeus, perhaps engaged in the transport of merchandise between the seaport and the capital. Two others drove donkeys (*ὀνηλάται*[5]), both of them living in the city, one in Diomeia, the other in Kollytos. Perhaps their business was to bring to market the produce of the flocks and fields of their patrons, demesmen of Kephisia and Aphidna respectively. We also find two porters (*φορτηγοί*[6]), a jar-carrier (*ἀμφορεαφόρος*[7]) and a skin-carrier (*ἀσκοφόρος*[8]). Those who have seen the long succession of carts laden with amphorae of water filing into Athens in the dim dawn from Marusi and Kaisariani will not be at a loss for a suggestion as to these men's employment, but we must leave it undecided whether it was water, wine, or some other substance which filled the jars and skin bottles of these two porters. We have also a labourer (*μισθωτός*), whose deme is wanting: we may conjecture that he was one of those who stood for hire at the Eurysakeion in the "Market Kolonos," and received in consequence the nickname Κολωνέται.[1]

---

[1] Wachsmuth, *l.c.* 488.

[2] Pollux vii. 193; Lucian, *Hermot.* c. 58. Cf. Suid. and Etym. Magn. *s.v.* The κάπηλοι were proverbially knavish, as we learn from Greek writers from Aeschylus downwards; Wallon (*Mém. de l'Acad. des Inscr. et Belles-Lettres* vol XIX. 2, p. 271. n. 2), calls attention to the fact that 'chez les chrétiens, le métier de κάπηλος fut regardé comme tellement vil, qu'il était défendu à l'évêque d' accueillir l'offrande de ceux qui l'exerçaient (*Constit. apost.* iv. 6, t. i. p. 294).'

[3] In Plato, *Resp.* ii. 373C the κουρεῖς appear in company with παιδαγωγοί, τίτθαι, τροφοί, κομμώτριαι. Plut. *de Garrul.* 509A, refers to their proverbial talkativeness, which is also alluded to in Archelaus' celebrated reply preserved in Plut. *Apophthegm.* p. 177A Ἀδολέσχου κουρέως ἐρωτήσαντος αὐτὸν 'πῶς σε κείρω;' 'σιωπῶν' ἔφη. Cf. Athen. iii. 98E; Aristoph. *Plutus*, 338; *Av.* 1441.

[4] Aristoph. *Thesm.* 491; Xen. *Hell.* 5. 4. 42; Plut. *Mor.* 130E; Plato, *Lysis.* 208B, etc.

[5] [Dem.] xlii. p. 1040. 28; Plut. *de cohib. ira* 461A; Pollux vii. 56. 148; Macho. *ap.* Athen. 582C.

[6] Pollux vii. 131 τῷ φορτηγῷ ἐπὶ τῶν τὰ φορτία ἀγόντων ἐμπόρων κέχρηται Αἰσχύλος......φόρτακας μέντοι ἡ παλαιὰ κωμῳδία τοὺς ἀχθοφορυῦντας ἐκ τοῦ ἐμπορίου καλεῖ. Cf. Lycophr. 1293 φορτηγοὶ λύκοι.

[7] Moeris, *s.v.*; Suid. *s.v.* ὁ κεράμια μισθοῦ φέρων. The latter quotes Menander Ῥαπιζομένη for ἀμφορεαφόρος (I do not understand why it appears as an adjective in L. and S.) and Aristophanes Ἥρωες for ἀμφορεαφορεῖν (Arist. *Frag.* 285. 3). Neither L. and S. nor the Thesaurus refers to Pollux vii. 130.

[8] Ἀσκοφόρος, ἀσκοφορεῖν occur only in Bekker *Anecd. Graec.* 214; Etym. Magn. p. 155;

We have now briefly reviewed the industry, agriculture, and trade of Athens so far as presented or suggested to us by the inscriptions under consideration: it only remains to indicate the several occupations which have not been included in the foregoing sketch.

A large number of slaves was, of course, used for domestic purposes, and it would be surprising if none of these appeared as freedmen. We meet with one manservant (*διάκονος*[2]) and two nurses (*τίτθαι*[3]): both of these latter are domiciled in Skambonidai, and one is described as *παιδί(ον) τίτθ(η)*. This leads us to mention the numerous freedwomen[4] described merely by the title *παιδίον*, who in all probability acted as domestic servants. Excluding the case just referred to, we have altogether fifteen such *παιδία*, who thus form a class outnumbered only by the wool-spinners: they are distributed over the demes Peiraeus (4), Skambonidai (3), Keiriadai (2), Melite, Kollytos (?), Thorikos, and Xypete—the demes of the remaining three being unknown. Of these all except Thorikos are urban or suburban demes.

We have, further, two freedmen plying the pen, in all probability as secretaries to magistrates: one of these, in Thorikos, is called *γραμματεύς*, the other, resident in Kollytos, is but a *ὑπογραμματεύς*. The office was one despised by the Athenians, as is sufficiently clearly evinced by Demosthenes' use of the term in scorn[5]: nevertheless it sometimes

---

Suid. *s.v.* Τὸ ἐν ταῖς Διονυσιακαῖς πομπαῖς τοὺς ἀστοὺς...ἀσκοὺς κατὰ τῶν ὤμων φέρειν, καὶ οἱ τοῦτο ποιοῦντες ἀσκοφόροι καλοῦνται (Bekker *l.c.*).

[1] Harpocr. *s.v.* Κολωναίτας (*s.* Κολωνέτας): Wachsmuth *op. cit.* i. 177 foll. ii. 277. Plato, *Resp.* ii. 371E; *Polit.* 290A; Aristoph. *Av.* 1152.

[2] The word bears the sense of messenger in Aesch. *Prom.* 942; Soph. *Phil.* 497; Aristot. *Eth. N.* vii. 6 καθάπερ οἱ ταχεῖς τῶν διακόνων, κ.τ.λ. It appears to be used for one who waits at table in Athen. x. 420E τὸν οἰνοχόον, τὸν διάκονον, τὸν μάγειρον.

[3] See note on inscription no. IV. iii. l. 16.

[4] In one case only, I believe, is the term used for a boy—Insc. VI. ii. 10. 11.

[5] *De Cor.* xviii. 162, p. 269. 20; *de fals. leg.* xix. 109, p. 371. 21 πανοῦργος καὶ θεοῖς ἐχθρὸς καὶ γραμματεύς: *Lept.* xx. 178, p. 506. 20.

happened that one who had occupied this lowly office rose to a position of trust and responsibility in the state. Most famous, perhaps, is the case of Nikomachos who, in the words of Lysias,[1] ἀντὶ μὲν δούλου πολίτης γεγένηται, ἀντὶ δὲ πτωχοῦ πλούσιος, ἀντὶ δὲ ὑπογραμματέως νομοθέτης.

Finally, we have the curious term ζευγοτρόφος,[2] one, that is, who keeps a yoke of beasts. What these were—whether they were oxen or, as seems more probable, horses—we are not told, nor do we learn for what purpose they were used, whether they served for ploughing, or transport, or as carriage or even race horses.

I.

On the reverse side of the same block upon which is inscribed *C.I.A.* iv. 2. 768 c [C. D. Buck in *Amer. Journ. Arch.* 1888, p. 149 foll.; Lolling in *Sitzungsber. der Berl. Akad.*, 1888, p. 251]. Letters small and somewhat irregularly formed, but well and clearly incised.

ΟΙΚ . ΦΙΛ . Π
Ε ΜΙΣΓΟΛΑΣΝΑΥΚΡΑΤΟΥΣΚΟΛ
ΛΥΝΑΥΚΛΗΣΝΑΥΚΡΑΤΟΥΣΚΟΛ
Ι ΗΔΙΣΤΗΝΠΑΙΔΙΟΝΕΣΚΑΜΟΙΚ
ΦΙ : Η
ΤΙΜΟΣΤΡΑΤΟΣΣΜΙΚΡΙΟΥΣΦΗΤ
ΡΑΙΟΝ< . ΧΙΣΤΗΝΣΦΗΤΤΟΙ

ΑΜΦΙΛΟΥΦΥΛΑΣ
-ΙΩΦΙΛΟΥΦΥΛΑ
ΤΑΛΑΦΙ : Η

ΤΑ
-ΜΜ

---

[1] xxx. 36. Cf. Antiphon. vi. 35.

[2] The word occurs only in Plut. *Pericl.* 12 οἱ δὲ κατὰ γῆν ἁμαξοπηγοὶ καὶ ζευγοτρόφοι καὶ ἡνίοχοι καὶ καλωστρόφοι καὶ λινουργοὶ καὶ σκυτοτόμοι καὶ ὁδοποιοὶ καὶ μεταλλεῖς: it is to be noticed that the company in which they here appear is far from being aristocratic. The verb ζευγοτροφῶ appears in Pollux viii. 132 ζευγήσιόν τι τέλος οἱ ζευγοτροφοῦντες ἐτέλουν.

In reviewing the various occupations mentioned in the ‘catalogi paterarum agentearum,’ I have purposely omitted the στιχιστής of Inscr. I. 7, being unable to say anything as to his function, and feeling uncertain of his very existence.

οἰκ(οῦ -) : φιά(λην) : Η
Μισγόλας Ναυκράτους Κολ-
λυ(τεὺς) Ναυκλῆς Ναυκράτους Κολ(λυτεύς)
Ἡδίστην παιδίον ἐ Σκαμ(βωνιδῶν) οἰκ(οῦσαν)
φι(άλην) : Η
Τιμόστρατος Σμικρίου Σφήτ(τιος)
- ]ραιον σ - χιστην Σφηττοῖ
[οἰκ(οῦντα) φι(άλην) : Η]
- - - - Π]αμφίλου Φυλάσ(ιος)
- - - - ]ς Ζωφίλου Φυλά(σιος)
- - - - -] ταλα(σιουργὸν) φι(άλην) : Η

l. 2. Μισγόλας Ναυκράτους Κολλυτεύς. Cf. *Aeschines* i. 41–53, 67. Antiphanes, Timocles, and Alexis quoted by Athenaeus viii. c. 22, 339 b, c. Suid. Μισγόλας and Τίμαρχος, *C.I.A.* ii. 1177 [Loewy, *Insch. Griech. Bildhauer*, No. 77].

Suidas' gloss (*s.v.* Μισγόλας)—οὗτος ἦν τοῦ Λεωδάμαντος ἐρώμενος—for which no authority is quoted, must surely be an error: it may perhaps have arisen from a misreading of the words of the gloss *s.v.* Τίμαρχος—Μισγόλᾳ καὶ Ἡγησάνδρῳ τῷ Λεωδάμαντος ἐρωμένῳ—which are in accordance with *Aeschines* i. 68–70, 111. Athenaeus' quotations prove that Misgolas was a favourite butt of the comic poets for his inordinate fondness for musicians and singers.

Aeschines (i. 49) refers to him as ἡλικιώτης ἐμὸς καὶ συνέφηβος, and states definitely that ἔστιν ἡμῖν τουτὶ (*Ol.* 108. 3 = 345 B.C.) πέμπτον καὶ τεσσαρακοστὸν ἔτος. It is improbable that the present inscription refers to a date much, if at all, later than that year, and with this conclusion the evidence of *C.I.A.* ii. 1177 is in agreement. We have there the inscription from the base of a statue by the famous sculptor Leochares: the actual dedication is lost, but there remains a list of ten Athenian citizens—one representative of each of the ten φυλαί—and two γραμματεῖς, and the artist's signature: Misgolas appears as the representative of the tribe Αἰγηΐς. In the absence of the dedicatory inscription there is, unfortunately, no indication of the nature of the decemviral college in question. The date of that inscription is fixed roughly by the character of the writing ('Titulus exaratus est medio saeculo quarto vel paullo post'—Koehler); by the name of the artist, who, although he lived as late as the reign of Alexander the

Great, seems to have worked after 350 B.C. mostly out of Athens; and by the names of two or three of the other members of the decemvirate, which are known from other sources (cf. Loewy, *l.c.*).

In the μαρτυρία of *Aeschines* i. 50 Misgolas is wrongly described as Μισγόλας Νικίου Πειραιεύς.

In *Aeschines* i. 42 he is referred to as older than Timarchus (οὔθ' ἡλικιώτῃ . . . . . πρεσβυτέρῳ ἑαυτοῦ): if, then, Misgolas was in his forty-fifth year at the time of Timarchus' trial (see above), some error must underlie Suidas' statement (*s.v.* Τίμαρχος) that Timarchus ἥλω ὑπὸ Αἰσχίνου γέρων ὤν.

l. 4. No other instance of a παιδίον in Skambonidae occurs in this class of inscriptions, except in *C.I.A.* iv. 2, 772 b, p. 188, A. col. 2, l. 8, where I believe, after an examination of the stone, that the true reading is . . . . BΩ rather than . . . . EΛ. With the reading of the *Corpus* the only possible restoration is ἐ[ν Πεντ]ελ(ῆι), for Δεκέλεια and Ἀγγελή are too short to fill the required space: but Πεντελή is an unlikely deme in itself, and moreover Πεντελῆσιν would probably stand in the place of ἐν Πεντελῇ.

l. 7. Σ-χιστην. The inscription not being στοιχηδόν, the interval between the initial Σ and the X may have been occupied by either one or two letters, but in the latter case one at least of the two must occupy a very small space. There is no Greek word of the form σ.χιστής, and of the form σ..χιστής only one, στιχιστής, which is found in Tzetz. *ad Lycophr.* 425, meaning 'one who writes in verse,' 'a poet': the use of the word is condemned by Thomas Magister, 463 (ed. Oudendorp). The verb στιχίζω, 'to write verse,' 'to be a poet,' occurs Anon. in *Fabric. Bibl. Gr.* Vol. VIII., 613 note (ed. Harles.), and in Theodorus Ptochoprodromus ii. 16 (Coray's *Atakta*, Vol. I.). 'Στιχισμός ap. Isidor. *Pel.* 3. 86 a Boiss. citatum, ubi Zosimum monet, ut accurate sibi indicet τὸν στιχισμὸν τῶν βιβλίων, esse, Numerum στίχων sive Versuum, non, quod Int. putavit, seriem seu ordinem librorum, animadvertit Fabric. B. Gr. Vol. 8, p. 72 Harl. Conf. Tzetz. *Hist.* 9. 291.'—L. Dindorf in *Thesaurus* 780 B.

The meaning of στιχιστής in the fourth century B.C. (if, indeed, it is to be here restored) is uncertain: probably it denotes one who had some duty to perform in connection with the production of books.

Σφηττοῖ. This locative form does not occur in the *C.I.A.*, but is found in *Aeschines* i. 97; *Lys.* 17. 8; cf. 17. 5; Steph. Byz. *s.v.* Cf. Ἀθμονοῖ, Κολωνοῖ, Θορικοῖ, Φαληροῖ, etc., and the more remarkable Παιανιοῖ from a substantive with *a*-stem. See Meisterhans, *Gramm. der Att. Inschr.*$^3$ p. 147, note 1269.

l. 10. The name Ζώφιλος does not seem to occur elsewhere, but it may well have existed side by side with the known Σώφιλος in the same way as Σωίλος with Ζωίλος, Σώπυρος with Ζώπυρος, etc.

## II.

On a block of bluish marble, greatest height, .11 m.; greatest breadth, .165 m.; thickness, about .122 m. As far as the end of line 9 the letters are fairly large and are carefully inscribed; afterwards they are smaller and more irregular.

ΛΘΜΟΙ
ΠΕΙΡΑΙΕΙ
ΓΟΣΑΠΟΦΥΓ
ΣΜΙΚΥΛΙΩΝ
5
ΗΝΣΤΑΘΜΟΝ:Ͱ
ΔΩΡΟΣΕΜΠΕΙΡΑΕΙ
ΥΓΩΝΛΥΚΙΣΚΟΝ
ΥΛΙΩΝΟΣΑΘΜΟΝΕΑ
10 ΙΑΛΗΝΣΤΑΘΜΟΝ:Η
ΩΡΛΕΜΠΕΙΡΑΕΙ
ΦΥΓΟΥΣΛΛΥΚΙΣ
ΚΥΛΙΩΝΟΣ
ΦΙΑΛΗΝΣΤ
15 ΑΓΧ Γ////
ΙΟΙ////
ΟΝ

φιάλην στ]αθμόν[ : Η
- - - - - ἐμ] Πειραιεῖ [οἰκ-
- - - - - - ]ος ἀποφυγ[-
Λυκίσκον] Σμικυλίων[ος
Ἀθμονέα]
φιά]λην σταθμόν : Η
- - - - - ]δωρος ἐμ Πειραεῖ [οἰκῶν
ἀποφ]υγὼν Λυκίσκον
Σμικ]υλίωνος Ἀθμονέα
φ]ιάλην σταθμόν : Η
- - - ]ώρα ἐμ Πειραεῖ οἰκ[οῦσα
ἀπο]φυγοῦσα Λυκίσκ[ον
Σμι]κυλίωνος [Ἀθμονέα
φιάλην στ[αθμόν : Η

We possess (*C.I.A.* ii. Pt. 1, 580) a decree of the Athmonenses in honour of the *μεράρχαι* of the year 324–3 B.C., among whom appears one *Λυκόφρων Λυκίσκου*, who may be the son of *Λυκίσκος Σμικυλίωνος*. It is possible that this was the *Λυκίσκος* who was archon in 344–3 B.C.; the date would tally well, but the name is a common one and there is no evidence to support the conjecture.

## III

On the face of a slab of bluish-white marble, broken on all sides; greatest height .205 m.; greatest breadth .37 m.; thickness .115 m. Inscribed on front and back. Found on the Acropolis in 1894. The writing is *στοιχηδόν* and fairly careful: height of letters .004–.006 m.

ɔΙΚ
ΓΩΝ
ΛΤΟΥ
ˉΑΘΜ:Η
ΕΚΡΑ
ΩΝ
ΥΔΟΥΤ
ΑΘΜΟ:Η
ΚΟΛΛΥ
ʔΝ
ΡΑΤΟ
ΣΥΝΚ
ΚΡΑ
ΜΠΥ
\Λ

ɔΥ
\ΟΜ:Η
ΓΕΝΚ
ɔΦΥΓΩΝ
ΔΗΜΟΣΤΡΑ
\ΡΦΙΑΛΣΤΑ:Η
ɔΣΕΝΚΥΔΑΟΙΚ
ιΣΟΧΟΑΠΟΦΥΓΩΝ
\ΥΦΡΟΝΑΕΥΘΥΚΛΕ
ɔΥΣΧΟΛΛΕΦΙΑΣΤΑΘ:Η
Β ΩΝΕΜΜΕΛΟΙΚΩΔΑΚ
ΤΥΛΙΟΓΛΥΑΠΟΦΥΓΩΝ
ΧΑΙΡΙΠΠΟΝΧΑΙΡΕΔΗ
ΜΟΥΛΛΑΙΕΚΑΙΚΟΙΕΡ
ΑΝΙΤΩΝΜΕΤΑΧΑΙΡΙΠ
ΠΟΑΛΑΙΕΦΙΑΛΣΤΑΘ:Η
ΩΦΕΛΙΩΝΕΝΚ̣ΟΛΛΥΟΙ
ΚΩΚΑΙΝΟΗΑΠΟΦΥΓΩΝ
ΕΥΠΟΛΕΜΟΝΕΥΠΟΛΕΜ
ΟΑΓΡΥΦΙΑΛΣΤΛΘΜΟ:Η
ΜΟΣΧΙΩΝΕΜΠΕΙΡΟ
ΩΕΜΠΟΡΟΑ̣ΗΟΦΥΓ
ΛΥΚΙΝΒΙΩΝΟΣ
ΦΙΑΛΣΤΑΘΜΟΝ
ΦΙΛΟΝΙΚΗΤ
ΛΕΥΚΟΟΙΚΟ
ΔΗΜΟΣΘΕΝΗΝ
ΛΟΦΥΛ/
ΛΔΟΥΤ

\Ε˥/\ᴗ< Λ
ΥΝΘΙΦΙΑΛΣΤ/
ΠΙΣΤΟΚΛΗΣΕΜΜΕ
ΚΥΠΟΔΗΜΑΤΟΓΑΠΟ
ΚΑΛΛΙΠΠΙΔΗΝΚΑΛΛ
ΟΥΑΦΙΔΦΙΑ ΣΓΑΘΜ:
ΔΙΟΝΥΣΙΟΣΕΝ ΚΛΟ
ΚΓΕΩΡΓΟΛΠΟ (ΓΩΝ
ϲΛΝΟΜΙˈΗΝˈ ΙΣΩΣ
ΡΛΤΟΚΗΦΙΦΙΑΣΤΑΘ:Η
ΠΟΛΥΤΙΜΟΣΕΝΚΟΛΛΥ
ΟΙΚΣΚΥΤΟΤΟΑΠΟΦΥΓ
ΚΑΛΛΙΑΝΚΑΛΛΙΑΔΟΥ
ΠΑΙΑΝΙΕΦΙΑΛΣΤΑΘ:Η
ΛΑΜΠΡΙΣΕΝΣΚΑΜΟΙΚ
ΟΥΣΤ ΤΟΗΑΠΟΦΥΓΟΥ
ΑΡΙΣΤΟΦΑΝΤΑΡΙΣΤΙ
ΩΝΟΑΦΙΔΦΙΑΛΣΤΑΘ:Η
ΕΥΠΕΙΘΗΠΑΙΔΙΤΙΤΟ
ΕΝΣΚΟΙΚΟΥΑΠΟΦΥΓΟ
ΑΡΙΣΤΟΦΑΝΤΑΡΙ-ΤΙ
ΩΝΑΦΙΔΝΦΙΑΛΣ
ΕΥΝ ΣΕΝΚΟΛ

ΚΩ
ΔΟΡ
ΛΙΒ/
ΣΤΓ
ΕΜΠ
ΛΥΣ
ΤΑ
Δ\

Col. I. l. 18. *οἰκ* | [*ῶν* - - - *ἀποφυ*] *γὼν* | [ - - - *ρ*]*άτου* | [ - - - *φιάλ*(*ην*) *σ*]-
*ταθμ*(*όν*) : Η
l. 23. *οἰκῶν ἀποφυγ*]*ὼν* | - - - *υδου* Τ | [ - - *φιάλ*(*ην*) *στ*]*αθμό*(*ν*) : Η
. 26. *ἐγ*] Κολλυ(*τῶι*) | [*οἰκῶν ἀποφυγ*]*ὼν* | - - - *ράτο* | [*υ* - -
Col. IV. l. 12. Δορ[ - - - *οἰκῶν* or -*οῦσα*] | *λιβα*[*νωτο*(*πώλης* or -*ις*) *ἀπο*-
*φυγὼν* or -*οῦσα*] | Στέ[*φανον*? - - - ] | *ἐμ* Π[*ει*(*ραιεῖ*) *οἰ*-
*κο*(*ῦντα*) *φιά*(*λην*) *στα*(*θμόν*) : Η]

### COL. II.

5 - - - - *φιά*(*λην*) *στ*]*αθμ*(*όν*) : Η
- - - - *π*(*ώλης*?) *ἐν* Κ-
- - *οἰκῶ*(*ν*) *ἀπ*]*οφυγὼν*
- - - - - *Δημοστρά*-
*του* Φρε]*άρ*(*ριον*) *φιάλ*(*ην*) *στα*(*θμόν*) : Η
10 - - - ]*ος ἐν* Κυδα(*θηναίωι*) *οἰκ*-
*ῶ*(*ν*) *χρυ*]*σοχό*(*ος*) *ἀποφυγὼν*
Πο]*λύφρονα* Εὐθυκλέ-
*ους* Χολλε(*ίδην*) *φιά*(*λην*) *σταθ*(*μόν*) : Η
Β[*ί*]*ων ἐμ* Μελ(*ίτει*) *οἰκῶ*(*ν*) *δακ*-
15 *τυλιογλύ*(*φος*) *ἀποφυγὼν*
Χαίριππον Χαιρεδή-
*μου* Ἀλαιέ(*α*) *καὶ κοι*(*νὸν*) *ἐρ*-
*ανι*(*στῶν*) *τῶν μετὰ* Χαιρίπ-
*πο*(*υ*) Ἀλαιέ(*ως*) *φιάλ*(*ην*) *σταθ*(*μόν*) : Η
20 Ὠφελίων *ἐν* Κολλυ(*τῶι*) *οἰ*-
*κῶ*(*ν*) *κλινοπ*(*οιὸς*) *ἀποφυγὼν*
Εὐπόλεμον Εὐπολέμ-
*ο*(*υ*) Ἀγρυ(*λῆθεν*) *φιάλ*(*ην*) *σταθμό*(*ν*) : Η
Μοσχίων *ἐμ* Πειρ(*αεῖ*) *ο*[*ἰκ*-
25 *ῶ*(*ν*) *ἔμπορο*(*ς*) *ἀποφυγ*[*ὼν*
Λύκιν Βίωνος [Ἀχαρν(*έα*)
*φιάλ*(*ην*) *σταθμόν* [ : Η
Φιλονίκη *τ*[*αλασι*(*ουργὸς*)? *ἐν*
Λευκο(*νόηι*) *οἰκο*[*ῦ*(*σα*) *ἀποφυγ*(*οῦσα*)
0 Δημοσθένην [Δημοφί-?
*λο*(*υ*) Φυλά(*σιον*) [*καὶ* . . . ?
*άδου* Τ . . . .

### COL. III.

Ὀλ]*ύνθι*(*ον*) *φιάλ*(*ην*) *στα*[*θμ*(*όν*) : Η
Πιστοκλῆς *ἐμ* Με[*λ*(*ίτει*) *οἰ*-
*κ*(*ῶν*) *ὑποδηματοπ*(*οιὸς*) *ἀπο*[*φυ*(*γὼν*)
Καλλιππίδην Καλλ[*ί*-
*ου* Ἀφιδ(*ναῖον*) *φιά*[*λ*](*ην*) *σταθμ*(*όν*) : [Η
Διονύσιος *ἐν* [Σ]*κα*(*μβωνιδῶν*) *ο*[*ἰ*-
*κ*(*ῶν*) *γεωργὸ*(*ς*) *ἀπο*[*φ*]*υγὼν*
Φανομέ[*ν*]*ην* [*κα*]*ὶ* Σώσ[*τ*-
*ρατο*(*ν*) Κηφι(*σιέα*) *φιά*(*λην*) *σταθ*(*μόν*) : Η
Πολύτιμος *ἐν* Κολλυ(*τῶι*)
*οἰκ*(*ῶν*) *σκυτοτό*(*μος*) *ἀποφυγ*(*ὼν*)
Καλλίαν Καλλιάδου
Παιανιέ(*α*) *φιάλ*(*ην*) *σταθ*(*μόν*) : Η
Λαμπρὶς *ἐν* Σκαμ(*βωνιδῶν*) *οἰκ*-
*οῦσ*(*α*) *τ*[*ί*]*τθη ἀποφυγοῦ*(*σα*)
Ἀριστόφαντ(*ον*) Ἀριστί-
*ωνο*(*ς*) Ἀφιδ(*ναῖον*) *φιάλ*(*ην*) *σταθ*(*μόν*) : Η
Εὐπείθη *παιδί*(*ον*) *τίτθ*(*η*)
*ἐν* Σκ(*αμβωνιδῶν*) *οἰκοῦ*(*σα*) *ἀποφυγο*(*ῦσα*)
Ἀριστόφαντ(*ον*) Ἀριστί-
*ων*(*ος*) Ἀφιδν(*αῖον*) *φιάλ*(*ην*) *σ*[*ταθ*(*μόν*) : Η
Εὔν . . . *ς ἐν* Κολ[*λυ*(*τῶι*) *οἰ*-

Col. II. l. 9. Φρε]άρ(ριον), or, perhaps, Χολ]αρ(γέα). A Δημόστρατος ’Αρχίου (Φρεάρριος) appears in a funeral inscription of the fourth century (*C.I.A.* ii. 2657); a Δημοστράτη [’Αν]τισθένους [Χολα]ργέως θυγάτηρ in a similar inscription (*C.I.A.* ii. 2201).

l. 11. We have two other instances of metic χρυσοχόοι resident in Κυδαθήναιον—*C.I.A.* ii. 2. 741 add. B. 13, p. 511; and iv. 2. 772 b B i. 13 *sq.* In the latter case the reading of the *C.I.A.* is ΧΡΥΣΟΧΟΟΝ | . . . ΤΛΛΟΟΙΚ, but a closer examination of the stone shows that the true reading is ΧΡΥΣΟΧΟΟΝ | . . ’ΤΔΛΘ, which confirms Scherling's conjecture [ἐγ Κ]υδαθ(ηναίωι) (cf. C. Scherling, *Quibus rebus singulorum Atticae pagorum incolae operam dederint*, in *Leipziger Studien*, 1898, p. 70). A confusion between Τ and Υ is a not uncommon error in inscriptions of this class: *e.g.*, Τ occurs in place of Υ in *C.I.A.* ii. 2. 772 B col. i. l. 10; on the other hand, the stone shows ΤΑΧΥΛ and not ΤΑΧΤΛ in *C.I.A.* iv. 2. 775 b col. i. l. 8.

l. 14. Β[ί]ων, or possibly Β[ό]ων. A second δακτυλιογλύφος, also resident in Melite, appears on the reverse of this stone (see No. IV. l. 6). For the term δ. Blümner (*Gewerbe und Künste*, Vol. III. p. 281) cites Diog. Laert. i. 2. 57 and viii. 1; Pollux, vii. 108, 179; Galen, xii. p. 205 K.; Suid. *s.v.* Πυθαγόρας; to which add Tzetz. *Hist.* vii. 212, xi. 68; Schol. Plat. p. 420 (Bekker); and Pollux ii. 155. Pollux refers to the word (ii. 155, vii. 179) as used by Critias and Plato; it does not, however, occur in the latter's works as we possess them.

l. 16. The identification of this Χαίριππος with the [Χ]αίριππος Χαιρ - - - of *C.I.A.* ii. 2. 775 B 2, 5 is rendered very probable by the fact that there also he appears in conjunction with a κοινὸν ἐρανιστῶν. For the formula κ. ἐρ. τῶν μετὰ τοῦ δεῖνος cf. *C.I.A.* iv. 2. 772 b p. 188 A col. ii. l. 23 *sq.* A Χαίριππος ’Αλαιεύς occurs in *C.I.A.* ii. 2. 1020.

l. 21. Κλινοπ(οιός) or, possibly, κλινοπ(ηγός): cf. Blümner, *op. cit.* Vol. II. p. 326. The former seems preferable, as having earlier authority (Plato, *Rep.* x. 596 E *sqq.*, Dem. *in Aphob.* xxvii. 9, p. 816) than the latter, which occurs only in *C.I.Gr.* 2135 (a late inscription 'incerti in Aegeo loci') and Theognostus (fl. ca. 815 A.D.).

l. 26. In *C.I.A.* ii. 2. 770, 5 and 8 we have ΛΥΚΙΝ ΒΙΩΝΟΣ and in line 11 . . ΩΝΟΣ ΑΧΑΡΝΕΑ. A careful examination of the stone shows ΒΙΩΝΟΣ/ in l. 5 and ꞌΩΝΟΣ in l. 11, which confirms the conjecture which can hardly fail to suggest itself that the person is the same in all three lines. In all probability the Λύκις Βίωνος of the present inscription is the same as that of *C.I.A.* ii. 770, and is related to Βίων Ἀχαρνεύς of the inscription published below, No. VI. col. ii. l. 15. A Σωκράτης Βίωνος Ἀχαρνεύς appears in *C.I.A.* iii. 1. 1113 a. [Βίων is omitted in Kirchner's *Prosopographia Attica*, Vol. I. p. 189].

l. 28. Cf. *C.I.A.* ii. 758 B ii. 4 (334 B.C.) Φιλονίκη χλανίδα ἐν κιβω(τίῳ) ῥάκος.

Col. III. l. 2. Ὀλύνθιον. Cf. Νικίαν Ὀλύνθιον, *C.I.A.* ii. 768, col. i. l. 25, and Κηρυκίδην Θηβαῖον iv. 2. 768 b A i. 5. The appearance of two Olynthians and a Theban in these inscriptions as plaintiffs is accounted for by the fact that they were ἰσοτελεῖς. Cf. Harpocration *s.v.* ἰσοτελής: ὅτι δὲ καὶ τῶν ἄλλων ὧν ἔπραττον οἱ μέτοικοι ἄφεσιν εἶχον ἰσοτελεῖς, Θεόφραστος εἴρηκεν ἐν ια' τῶν Νόμων· οὗτος δέ φησιν ὡς ἐνιαχοῦ καὶ πόλεσιν ὅλαις ἐψηφίζοντο τὴν ἀτέλειαν Ἀθηναῖοι, ὥσπερ Ὀλυνθίοις τε καὶ Θηβαίοις, where for ἀτέλειαν ἰσοτέλειαν should probably be read. Cf. Aeschines ii. 155, Schaefer Demosthenes ii.$^{2}$ 155. Among the plaintiffs we also find ἰσοτελεῖς in *C.I.A.* iv. 2. 768 c I. ll. 12, 16; 772 b B i. 10: δημόσιοι in *C.I.A.* iv. 2. 773 b A 33; 775 b col. iii. l. 17: πρόξενοι in *C.I.A.* ii. 772 B l. 16; iv. 2. 775 b i. 22 (cf. Wilamowitz in *Hermes* xxii. p. 239): a Πλαταιεύς (?) in *C.I.A.* iv. 2. 768 b B col. i. l. 1; and a Τροζήνιος, *ib.* col. ii. l. 3. Cf. Hypereides v. *c. Athenog.* c. 33 ὑμεῖς (τοὺς Τροιζηνίους) ὑπεδέξασθε καὶ πολίτας ἐποιήσασθε.

l. 4. For another ὑποδηματοποιός cf. the inscription published below, No. VI. col. i. l. 12. We have three instances of metic σκυτοτόμοι in Melite—*C.I.A.* ii. 772 b i. 14; iv. 2. 768 c ii. 11; 773 b A 34. The word ὑ. has hitherto been thought to belong to late Greek only: cf. Blümner, I. 271, L. and S., both of whom cite Chrysost. in Math. Homil. 49 (Vol. II. p. 317): ὑποδημάτων δημιουργός is used by Plato, *Gorg.* 447 D.

l. 9. The reading is very doubtful and the proposed restoration unsatisfactory, owing to the omission of the patronymic. It is similar to

Εὐτυχὶς καπηλὶς ἀποφυγοῦσα Σώστρατον Μνησίστρατον Ἀλωπεκῆθεν (*C.I.A.* ii. 2. 768, l. 16 f.), save that no patronymics are given throughout that inscription. Even where two brothers' names occur the father's name and the demotic are usually repeated, as, *e.g.*, *C.I.A.* ii. 2. 770. 1f., 773 A col. ii. 28 f., and above No. I. l. 2 f. The letters HN and ΣΩΣ are certain. The name Φανομένης does not seem to occur, but may be justified by the analogy of Φανόδικος, Φανοκλῆς, Φανόκριτος, Φανόμαχος, etc.

l. 13. A Καλλίας Καλλαίσχρου Παιανιεύς occurs in a fourth century funeral inscription, *C.I.A.* ii. 3. 2410: also a Καλλίας Παι(ανιεύς) as πρύτανις in 209–10 A.D. (*C.I.A.* iii. 1. 10).

l. 16. Τίτθη: cf. l. 19 below. All τίτθαι were non-burghers: a citizen who acted in that capacity was liable to have her burgher rights attacked, Dem. lvii. 42 ff. 45. See *Die griechischen Privataltertümer* by Iwan von Müller, ed. 2, § 94, p. 163, note 2, in Iwan Müller's *Handbuch der Klassischen Altertums-Wissenschaft.*

l. 19. Εὐπείθη. Dr. Wilhelm has called my attention to a parallel case: in Latyschev, *Inscriptiones Orae Septentrionalis Ponti Euxini*, Vol. IV. No. 376,—a funeral inscription of the first quarter of the fourth century B.C.—we have Ἱπποκράτη Ἡρακλειδέω, where Ἱπποκράτη is a feminine nominative. Latyschev compares Ἡγεκράτη in Bechtel-Fick, *Die Griechische Personennamen*,[2] p. 174.

l. 23. Probably Εὔν[ομο]ς or Εὔν[ικο]ς.

## IV.

On the reverse side of the same block on which is inscribed the preceding. The writing is not *στοιχηδόν*, and is much less careful than on the face of the stone, being very similar to that of I.

ΥΕΥΩ

ΛΟΙΚΚΟΥΡΕΦΙ:Η
ΗΡΑΤΟΥΜΕΛΙΤ
ΣΩΞΙΔΗΜΟΥΞΥΠ
ΕΜΜΕΛΙΤΗΙΟΙΚΔΑΚΤΥ

ΗΡΑΤΟΣΝΙΚΗΡΑΤΟΥΜΕΛ
ΙΔΙΠΠΟΣΣΩΞΙΔΗΜΟΥΞΥΠ
ΝΟΝΑΠΑΙΔΙΟΝΕΜΜΕΟΙΚΦΙ:Η
ΝΙΚΗΡΑΤΟΣΝΙΚΗΡΑΤΟΥΜΕΛΙΤ
ΦΕΙΔΙΠΠΟΣΣΩΞΙΔΗΜΟΥΞΥΠΕ
ΣΤΡΑΤΟΝΙΚΗΝΕΜΜΕΛΟΙΚΤΑΛΑ
\ ΦΙΑ:Η
ͻΥ ΝΙΚΗΡΑΤΟΣΝΙΚΗΡΑΤΟΥΜΕΛΙΤ
Η ΦΕΙΔΙΠΠΟΣΣΩΞΙΔΗΜΟΥΞΥΠΕΤ
ΑΡΙΑΝΘΗΝΕΜΜΕΟΙΚΤΑΛΑΦΙ:Η
ΛΥΣΙΑΔΗΣΧΙΩΝΟΣΑΛΩΠΕΚ
ΣΩΣΤΡΑΤΗΝΤΑΛΑΣΙΟΥΡΓΕΜΜΟΙΚ
ΦΙ:Η
ΑΛΛΙΑΣΚΑΛΛΙΚΡΑΤΟΥΣΑΦΙΔ
ΣΤΟΝΕΓΚΟΛΛΥΟΙΚΟΝΗΦΙ:Η
ʹΛΗΣΑΡΙ⁻ΤΟΦΑΝΟΥΣΑΧΑΡ
ΓΜΜ ͻΟΥΡΦΙ:Η
ΟΥΛΕΥ
ΦΙ:Η

- - - - λ( - ) *οἰκ(οῦντα) κουρέ(α) φι(άλην)* : H
Νικήρατος Νικ]*ηράτου* Μελιτ(*εύς*)
5 Φείδιππος] Σωσιδήμου Ξυπ(*εταιών*)
- - -] *ἐμ* Μελίτηι *οἰκ(οῦντα) δακτυ(λιογλύφον)*
*φι(άλην)* : H]
Νικ]*ήρατος* Νικηράτου Μελ[ιτ(*εύς*)
Φε]*ίδιππος* Σωσιδήμου Ξυπ(*εταιών*)
10 - - *νονα παιδίον ἐμ* Με(*λίτηι*) *οἰκ(οῦσαν) φι(άλην)* : H
Νικήρατος Νικηράτου Μελιτ(*εύς*)
Φείδιππος Σωσιδήμου Ξυπε(*ταιών*)
Στρατονίκην *ἐμ* Μελ(*ίτηι*) *οἰκ(οῦσαν) ταλα(σιουργὸν)*
*φιά(λην)* : H
15 Νικήρατος Νικηράτου Μελιτ(*εύς*)
Φείδιππος Σωσιδήμου Ξυπετ(*αιών*)
Ἀριάνθην *ἐμ* Με(*λίτηι*) *οἰκ(οῦσαν) ταλα(σιουργὸν) φι(άλην)*: H
Λυσιάδης Χίωνος Ἀλωπεκ(*ῆθεν*)
Σωστράτην *ταλασιουργ(ὸν) ἐμ* M(*ελίτηι*) *οἰκ(οῦσαν)*
20 *φι(άλην)* : H
K]*αλλίας* Καλλικράτους Ἀφιδ(*ναῖος*)
- ]*στον ἐγ* Κολλυ(*τῶι*) *οἰκ(οῦντα) ὀνη(λάτην) φι(άλην)* : H
- -]*λης* Ἀριστοφάνους Ἀχαρ(*νεύς*)
- - - *ἐμ* M[*ελ(ίτηι) οἰκ* - -]*ουρ(γὸν) φι(άλην)* : H
25 - - - - - - - - - - - - - - - *ου* Λευ(*κονοεύς*)
- - - - - - - - - - - - - - - - - - *φι(άλην)* : H

l. 1. Perhaps . . *ο*]*υ* Εὐω(*νυμεύς*). The letters in l. 1 are considerably larger than those of the rest of the inscription.

l. 6. *Δακτυλιογλύφος* : cf. III. col. ii. l. 14 (and note).

l. 12. A *Φείδιππος Ξυπεταιών* occurs three times in the *Tabulae Curatorum Navalium*: *C.I.A.* ii. 2, 793 g, 14 (357–6 B.C.); 794 d, 22 (356–5 B.C.); 808 c, 111 (340–39 B.C.): cf. 809 d, 248 (340–39 B.C.), where the name, though it does not occur on the stone as preserved, must be restored.

l. 18. *Λυσιάδης Χίωνος Ἀλωπεκῆθεν* occurs in a sepulchral inscription, *C.I.A.* ii. 3. 1818. A *Χίων* was eponymous archon in 365–4 B.C., but his deme is unknown.

l. 22. *ὀνηλάτην*: cf. *C.I.A.* iv. 2 b, p. 188, A, col. ii. l. 3.

## V.

On a fragment of white marble. Maximum height .04 m.; max. breadth .12 m.; max. thickness .041 m. The writing is careful and the letters are well formed.

Η
ΙΣΑΛΠΟΦΥΓΟ
ϽΝΙΔΗΝ
ΟΜΟΝ : Η
5 ΛΧΑΡΝΗΣΙΝΟ
ΓΩΝΠΑΝ

*φιάλην σταθμόν* :] Η
- - - *οἰκοῦ*]*σα ἀποφυγο*[*ῦσα*
- - - - - - *Παι*]*ονίδην*
*φιάλην στα*]*θμόν* : Η
- - - *Ἀχαρνῆσιν ο*[*ἰκῶν*
*ἀποφυ*]*γὼν Παν* - - - -

## VI.

A slab of bluish marble, broken on three sides: found on the Acropolis. Greatest height .21 m.; greatest breadth .29 m.; thickness ca. .087 m. Writing small and very careless, many letters being only half formed.

Α/ ˪
ΕΦι ΝΥΣι
ΙΟΥ› ʌΑΡΓΕΑ
ΔΗΜΙΙ ΡΙΑΕΜΜΕΛΙιΗΙ
ΟΙΚΟΥΑΠΕΦΥΓΕΚ ⊏ΔΗ
ΜΟΝΚιΦΙΣΙΕΑ
ΧΡΥΣΙΣΕΜΜΕΛΙΤΕΙΟΙ
ΚΟΥΣΑΤΑΛΑΣΙΟΥΡΑΠΕ
ΦΥΓΕΙΕΡΟΜΝh ΟΝΑ
ΕΜΜΕΛΙΤΕΙΟΙΙ ·ΥΝΤΑ
ΑΓΑΘΟΚΛΗΣ ΓΙ ΥΤ
ΟΙΚΩΥΠΟ Η/ ΤΟ ˪Φ
ΚΑΤΑΓΩΓΙΟ˩ΕΜΜΕΛΙΤ
ΟΙΚcΥΝΤʌ
ΕΥcΥΛΟΣΑΛΩΠΕΚΗΣΙΝ
ΟΙΚΩΝΚΑΠΙΙΛΟΣ.ΑΠΕΦΥ
ΣΩΤΗΡΙΔΗΝΕΓΚΕΙΡΙΑ
cΙΚΟΥΝΤΑΔΙΟΓΝΗΤΟΝ
ΕΥΑΛΚΟΥΠΟΡΙΟΝ
ΓΟΙΚΙΑΤΗΣΕΝΣΚΥΡΟΙ
ΟΙΚΩΝʌΠΕΦΥΓ ΑΝΔΡΟ
ΚΛΕΙΔΗΝΑΝΔΡυΣΟΕΝΟ
ʏΣΑΧΑΡΝΕΙΑ
ΥΚΡΑΤΗΣΕΓΚΕΡΑ/\ΕΩ
ΙΚΩΝΑΠ⊏ΦΥΓΕΑΜΙΙΚ
ΝΑΜΦΙΚΛΕΟΥΣΚΕΦ
Ν

Ι ΞΗΙ/
ΟΝΟΥ/ Υ
ΠΟΛΥΟΚΤ
ΑΤΟΥ ΚΣ\ʌΙ
ΦΙΛΟΟΙΙΡΟΣΕΜΠ
ΟΙΚΩΝ
ΦΙΛΟΚΡΑΤΗΣΦΙΛυΟ⁞
ΠΑΙΔΙΟΝ
ΜΕΝΕΣΤΡΑΤΗΕΜΠ˪ΙΡ
ΟΙΚΟΤΑΛΑΣΙΟΑΠΕΦΥ
ΟΥΤΟι⌐ΑΝΤΕΣΒΙΩΝΑ
ΑΧΑΡΝΕΙΑ
\ΝΟΚΛΕΙΑΕΜΜΕΛΙΤ
ΟΙΚΟΑΠΕΙΥΚΑΛΛΙ‾Γ
ΙΑΤ ΝΚΑΛΛΙΣΘΕΝ ι
ΛΧΛΡΝΕ
ΗΡΑΚΛΕΙΑΙΙΞ\ΙΓΕΙc
ΥΡΓΟΣΕΓΚΕΡΑΑΠΕΦΥ
ΑΥΤΟΚΛΕΙΑΧΑΙΡΙΠΠ
ΟΥΠΙΘΕΙΑ
ΣΚʌ/\ΑΝΔΡΟΣΕ˪ΥΓΟΤ
ΡΟΦΟΣΕΜΠΕΙΡΑΙΟΙΚΩΝΛ
ΕΥΘΥΜ\ΛΧcΝΕΥΔΙΚΟΥΞΥΠΕ

ΚΑΙ
ΚΕΡΚ
ΙΚΟΥ
ΑΠΕΦ
ΡΓΛΞ
ΚΑΙΛ
Ν/Τ
Κ
ΡΟʌ
ΛΛ
Λ

COL. I.

ἐφ[υγε Διο]νυσ- - - -
ιου[ς Χο]λαργέα
Δημη[τ]ρία ἐμ Μελί[τ]ηι
οἰκοῦ(σα) ἀπέφυγε Κ[λ]έδη-
μον Κ[η]φισιέα
Χρυσὶς ἐμ Μελίτει οἰ-
κοῦσα ταλασιουρ(γὸς) ἀπέ-
φυγε Ἱερομνή[μ]ονα
ἐμ Μελίτει οἰ[κο]ῦντα
Ἀγαθοκλῆς [ἐ]γ [Κολλ]υτ(ῶι)
οἰκῶ(ν) ὑπο[δ]η[μα]το(ποιὸς) [ἀπέ]φ(υγε)
Καταγώγιον ἐμ Μελίτ(ει)
οἰκοῦντα
Εὔθυλος Ἀλωπεκῆσιν
οἰκῶν κάπηλος ἀπέφυ(γε)
Σωτηρίδην ἐγ Κειρια(δῶν)
οἰκοῦντα Διόγνητον
Εὐάλκου Πόριον
Ποικίλτης ἐν Σκύροι
οἰκῶν ἀπέφυγ[ε] Ἀνδρο-
κλείδην Ἀνδροσθένο-
υς Ἀχαρνεία
[Ε]ὐκράτης ἐγ Κεραμέω(ν)
[οἰ]κῶν ἀπέφυγε Ἀμφικ-
[ήδη]ν Ἀμφικλέους Κεφ-
[αλῆθε]ν

COL. II.

Πολύοκτ[ον - - -
άτου [ἐ]κ Σ[καμβωνιδῶ(ν)?]
Φιλόθηρος ἐμ Π[ειρ(αεῖ)
οἰκῶν
Φιλοκράτης Φιλοθή(ρου)
παιδίον
Μενεστράτη ἐμ Πειρ(αεῖ)
οἰκο(ῦσα) ταλασιο(υργὸς) ἀπέφυ(γον)
οὗτοι πάντες Βίωνα
Ἀχαρνεία
[Φ]ανόκλεια ἐμ Μελίτ(ει)
οἰκο(ῦσα) ἀπέφυ(γε) Καλλί[σ]τ-
ρατ[ο]ν Καλλισθέν[ου](ς)
Ἀχαρνέ(α)
Ἡρακλεία . . . ιγειο-
υργὸς ἐγ Κερα(μέων) ἀπέφυ(γε)
Αὐτοκλεία Χαιρίππ-
ου Πιθεία
Σκάμανδρος (ζ)ευγοτ-
ρόφος ἐμ Πειραι(εῖ) οἰκῶν ἀ[π](έφυγε)
Εὐθύμαχον Εὐδίκου Ξυπε[τ](αιόνα)

This stone is certainly a portion of the same stele as the fragment *C.I.A.* iv. 2, 776 c, p. 192. The character of the marble, of the writing, and of the formula used, as well as the equal thickness of the two fragments, puts the matter beyond doubt, and a further confirmation is given by the fact that on the right hand side of this stone is a surface smoothed for writing upon, of a breadth of ·065 m., exactly corresponding to the surface upon which occurs the smaller inscription *C.I.A.* iv. 2, 776 c, though in the latter case on the right hand side, in the former on the left.

Col. I. l. 3. The remnant of the fourth letter still visible appears to me to belong rather to a Χ than to a Σ; in that case we must suppose that the name ended with the ΟΥ, and that a fault in the stone compelled the engraver to write Χ ΟΛΑΡΓΕΑ. We have similar instances in O. Kern, *Inschriften von Magnesia a. M.*, No. 21, l. 6 ('Vor dem 5. Buchstaben Lücke eines Buchstabens; alte Verletzung des Steines: ebenso hinter dem 9. Buchstaben.') and No. 105, l. 82 ('Zwischen *καὶ* und *φανερόν* Loch vor der Schrift.'); also in *C.I.A.* ii. 2. 1048. 9 (now in the British School at Athens) where a considerable fault in the stone intervenes between *τοῦ* and *Σελεύκου* and has also compelled the engraver to inscribe ΥΜΥΡ in l. 10 in smaller characters than the rest.

l. 5. Κ[λ]*έδημον*. Either *ε* stands for *ει* or, as I would judge almost more likely in view of the general character of the inscription, the *ι* has been omitted by an error of the engraver.[1]

l. 12. *ὑποδηματοποιός*. Cf. No. III. col. iii. l. 4.

l. 20. It looks as if the engraver had first written a Π as second letter, and afterwards corrected it. The omission of the man's occupation may be intentional (cf. l. 5 above, col. ii. l. 18), or the name may have been directly derived from the occupation, the one title being used to designate both. For *ποικιλτής* cf. Aeschines i. 97, p. 14 (Pollux vii. 34), Arist. *Meteor.* 3. 4. 29, Hesych. *s.v.* *ποικιλεύς*. Blümner *op. cit.* i. 209. *Σκύροι* = *Σκύρῳ* is probably an intentional archaism: but see Meisterhans, *Gr. der Att. Insch.*[3] § 21. 11.

l. 21. An *Ἀνδροσθένης Ἀνδροκλέους Ἀχαρνεύς* occurs in a sepulchral inscription of the fourth century B.C. (*C.I.A.* ii. 1914) Ἀ[*νδροκ*]*λείδη*[*ς*] *Ἀχαρ*(*νεύς*) is restored by Kirchner (*Prosop. Att.* i. No. 849) as the name of a trierarch in *C.I.A.* ii. 812 b, 46. 53 (a 'tabula navalis' of about 323 B.C.):

---

[1] In the former case this would be one of the latest examples, if not absolutely the latest, of the representation of the pseudo-diphthong *ει* by a simple Ε. With reference to this pseudo-diphthongal *ει* Meisterhans (*Gramm. der Att. Inschr.*[3] § 10. 15. p. 20) says: 'Der Uebergang von der Schreibung Ε zu der heute üblichen Schreibweise ΕΙ vollzieht sich in einem mehr als zweihundertjährigen Zeitraum; denn die ersten, freilich ganz vereinzelten Spuren der diphthongischen Schreibweise führen in den Anfang des VI. Jahrhunderts hinauf: ʼΕΙ*μί* neben *μελεδαίν*Ε*ν* (Infinitiv, c. 570 v. Chr.), und die letzten Spuren der monophthongischen Schreibweise lassen sich verfolgen bis in die zweite Hälfte des IV. Jahrhunderts: *ἀποδῶσ*Ε*ν* (Infinitiv, 334 v. Chr.).' Cf. *C.I.A.* i. 437. 8 ΚΛΕΔΕΜΟΣ.

a man of the same name occurs as a witness in [Demosth.] xlviii. The two may be identical with each other and with the Ἀνδροκλείδης of our inscription.

l. 23. For the form Ἀχαρνεία (cf. col. ii. l. 16; Αὐτοκλεία, col. ii. l. 23; Πιθεία, l. 24) see Meisterhans, *Gram. der Att. Inschriften*$^{3}$ § 15. 19 'Im IV. and III. Jahrh. v. Chr., besonders aber innerhalb der Jahre 350–300 v. Chr., wird, abweichend von der früheren Schreibung, ε vor Vokal vielfach durch ει dargestellt.' Among the instances quoted by Meisterhans is [Ἀχα]ρνεία in *C.I.A.* iv. 2. 776 c, A. 11, a fragment of the same inscription as our present one (see above).

Col. II. l. 15. For Βίων Ἀχαρνεύς, see No. III. col. ii. l. 26 and note. The formula ἀπέφυ(γον) οὗτοι πάντες is unparalleled: the name of the plaintiff is usually repeated afresh in each item; once the same name occurs as many as five times in successive paragraphs (*C.I.A.* iv. 2, 772 b. p. 189, col. i. ll. 23, 25, 28, 30, 32). The paragraph, which I take to commence with l. 9, has other difficulties—the omission of Philotheros' occupation (but see note on col. i. l. 20), and the extraordinary item of ll. 11, 12, in which we have (1) the addition of Philocrates' father's name, the Philotheros just mentioned; (2) the consequent omission of the deme of residence; and (3) the designation of a male as παιδίον, not found elsewhere in this class of inscriptions.

l. 18. A Καλλίστρατος Καλλιάδου Ἀχαρνεύς occurs in *C.I.A.* ii. 2, 660. 45, ii. 2. 661. A Καλλίστρατος Ἀχαρνεύς appears as πρύτανις of the tribe Οἰνηΐς in 360–59 B.C. (*C.I.A.* ii. 2. 868).

l. 21. For the accent, Ἡρακλεία or Ἡράκλεια, cf. Bechtel, *Die Attischen Frauennamen*, Göttingen, 1902, pp. 54 f., 59.

l. 23. Αὐτοκλῆς Χαιρίππου Πιθεύς appears again in *C.I.A.* iv. 2. 563 b, 25; at any rate, it is not improbable that the two are identical. Kirchner's entry (*Prosopogr. Att.* i. 2731, p. 182) is as follows: 'ΑΥΤΟΚΛΗΣ ΧΑ(Ι)ΡΙΠΠΟΥ (I) ΠΙΘΕΥΣ. iv. 2. 563 b, 25 ἔφηβος a. 334–3. Eius filius ΧΑΙΡΙΠΠΟΣ (II.) Α.Π.' If, however, the reference of the last clause is to the Χαίριππος Αὐτοκλέου Πιθεύς of *C.I.A.* ii. 2. 774, l. 14 it is open to objection, for if Αὐτοκλῆς was ἔφηβος in 334–3, it is unlikely that his son would be of an age to bring a δίκη ἀποστασίου before, at the earliest, the closing years of the century: but *C.I.A.* ii. 2. 774 can hardly be dated so late. I would suggest that Kirchner's entry might be re-written: 'ΑΥΤΟΚΛΗΣ (II.) ΧΑ(Ι)ΡΙΠΠΟΥ ΠΙΘΕΥΣ iv. 2. 563 b 25 ἔφηβος a. 334–3. Eius pater ΧΑΙΡΙΠΠΟΣ ΑΥΤΟΚΛΕΟΥ (I.) Π.'

l. 25. *Ζευγοτρόφος.* See the concluding paragraph of my introduction (p. 211, above).

l. 27. In *C.I.A.* ii. 773, A, ii. l. 45 we have ΕΥΘΥΜΑΧΟΝ ΕΥΔΙΚΟΥ . . . . . ΑΙ, where we may now restore the demotic [Ξυπετ]αι(όνα).

I am unable to restore the name of the occupation in line 21. In column iii. the reading of lines 17–21 is very precarious owing to the state of the stone's surface.

## VII.

A block of white marble broken on two sides: inscribed on front and back. Thickness ·115 m. The surface of the stone has in front (A) a maximum height of ·135 m. and a breadth of ·1 m.: the corresponding measurements for the reverse side (B) are ·235 m. and ·18 m. The writing is careful and regular.

A.

Η∠(ΛΙ∪Ν
ΤΑΛΑΣΙΟ
ΕΓΑΚΛΕΙ
ΕΥΚΟΝΟΕ/
ΦΙΑΛΗΝ
ↃΤΗΡΙΣΕΜ
ΑΛΑΣΙΟΥΡ
<ΗΦΙΣΟΔΩ
ΑΧΑΡΝΕ
‥ ΦΙΑ^
ΜΕΝΩ
ΟΙΚς
ΟΨ

Ἡδύλιον[- - οἰκοῦσα
ταλασιο[υργὸς ἀποφυγοῦσα
[Μ]εγακλεί[α - -
[Λ]ευκονοέ[α
Φιάλην [σταθμόν : Η
[Σ]ωτηρὶς ἐμ [- - - οἰκοῦσα
[τ]αλασιουρ[γὸς ἀποφυγοῦσα
Κηφισόδω[ρον - -
'Αχαρνέ[α
Φιά[λην σταθμόν : Η
Μένω[ν - -
οἰκῶ[ν - - ἀποφυγὼν
'Οψ - - -

B.

On the reverse side the inscription is very badly weathered, and the difficulty of reading is still further increased by a faulty vein in the marble running diagonally across the stone from the top right-hand corner, the letters written on which are in almost every case illegible.

\ Τ Ι Θ Η Τ Α Ι
Φ Ι Ε Ι Ι Ε Ν Ο
Α Ν Λ Θ Η Μ Α      ıı
C Η   Ι Ε       Ι Κ Λ Σ
\ Λ Ν Λ Γ ᑐ   Ϙ Ε Ι Ν Τ Λ Ο Ν
Ε Λ Ρ ∩       Σ Τ Ο Υ Ν Ο
\   Τ   Σ Τ Α Θ Μ Ο Ν
Ι Ϛ ^ Ε Κ Γ Ο Ν Ω Ν Τ Ω Ν
Ι Ν Ε Ι Κ Α Τ Α Λ Υ
Ν Α Κ Ε Ι Μ Ε Ν Ο Υ
Ν Π Ρ Υ Τ Α Ν Ε Ω Ν

l. 1. [ἀν]ατίθηται - - ; l. 3. ἀνάθημα ; l. 5. ἀναγρ[ά]φειν τὰ ὀν[όματα - - ? l. 7. σταθμόν ; l. 8. [τῶν] ἐκγόνων τῶν ; l. 10. [ἀ]νακειμένου ; l. 11. [τῶ]ν πρυτάνεων.

After l. 11 follows a blank space ·056 m. in height: this was succeeded by a further inscription, as is proved by the traces of two or three letters still preserved at the foot of the fragment, probably of the same nature as the inscription on side A. In that case it may well be that lines 1–11 on side B contained the heading of the stele, possibly in the form of an extract from the law dealing with the dedication of *φιάλαι ἐξελευθερικαί.*

The *Κηφισόδωρος Ἀχαρνεύς* of A, l. 8, may perhaps be the *Κηφισόδωρος Παναίσχους Ἀχαρνεύς* of *C.I.A.* ii. 2. 946.

MARCUS N. TOD.

# EXCAVATIONS AT PRAESOS. I.

---

## § 1.—INTRODUCTORY.

(PLATE VII.)

THE excavations at Praesos undertaken by the British School in 1901 were begun on May 7th and continued until July 3rd. The Cretan Exploration Fund contributed £200, the Society of Dilettanti £50, and the Prendergast Fund of Cambridge University £40, towards the cost of the campaign. With me were two members of the School, Mr. J. H. Marshall, of King's College, Cambridge, and Mr. R. Douglas Wells, architect. Mr. Wells made a survey of the city-plateau and the adjoining ravines (Plate VII) and a large number of plans and drawings, many of which accompany this article. Mr. Marshall rendered valuable help in the work of supervision, and undertook a systematic exploration of the surrounding district. I much regret that it has been impossible for him to contribute to this report more than the section on the Megalithic House, printed below (§ 4). Soon after the close of the season he was appointed Director of the Archaeological Survey of India, and has necessarily been absorbed in the duties of that important post. I have had the use of his notes on some of the tombs.

The name of Praesos, like that of many other Cretan towns, survived through the middle ages. In the seventeenth century there was a Venetian village called Πρασσοὺς on the level ground south of the First Acropolis (Plate VII), and the name as well as the ruins of the ancient city were known to Venetian antiquaries.[1] Among modern travellers Spratt gave the first general description of the site and its surroundings.[1] In 1884 Professor Halbherr discovered the first Eteocretan inscription, at the foot of the Altar-hill, and in 1887 its publication by Prof. Comparetti (*Museo Italiano*, ii. p. 673) called the attention of scholars to the problems of the district. In the summer of 1894 Prof. Halbherr began an excavation on the summit of the Altar-hill, and also at a site rich in votive terra-cottas below the village of Vavélloi, but after a few days of fruitful work he was stopped by the Turkish authorities.[2] About this time too the Eteocretan region was explored by Prof. L. Mariani, and in greater detail by Dr. A. J. Evans, who was here in 1894 and in 1896. Then came the insurrection of 1896. The people of Vavélloi, the rich Moslem village overlooking the site, were besieged by their Christian neighbours, but on the second night fought their way through to Sitia leaving the country in the hands of the Christians. In the months of disorder that ensued there was a good deal of reckless digging on both the sites where Prof. Halbherr had made a successful beginning, and mule-loads of terra-cotta figures and plaques were carried off to the neighbouring villages. Much was irretrievably dispersed, but a large number were saved by the enlightened energy of the Bishop of Hierapetra, who has since presented his collection to the museum at Candia. With the consent of Dr. Hazzidakes, Mr. E. S. Forster has undertaken to study and describe them in conjunction with those found in our own excavations. Prof. Halbherr had no wish to return to Praesos, and upon the institution of the Cretan Fund in 1899 it was one of the sites reserved for British enterprise by the good-will of H.R.H. Prince George of Greece, the High Commissioner of the Powers. The Directors of the Fund assigned it to the British School, and in February, 1901, I went down to reconnoitre the site, which had been visited by Mr. Marshall in the preceding January. Both Dr. Evans and Prof. Halbherr put their knowledge of the district freely at our disposal; in particular Dr. Evans's unpublished diary of his journeyings in the district proved of infinite use. Unfortunately the report of Prof. Halbherr's excavations did not appear until our campaign was at an end and our plans already engraved.[1]

---

[1] The ruins at *Pressos* are described by Coronelli in his *Isolario*, quoted by Pashley (*Travels in Crete*, i. p. 290) and in the list of Cretan cities extracted by Flaminio Cornelio from a MS. chronicle of Andreas Cornelio (*Creta Sacra* i. p. 117, Venice 1755). The latter passage runs: *Pressos, cujus ruinae super collem a Sethia procul viii. mille passibus apparent, eamque everterunt Hierapytnii, ut scribit Strabo, qui et refert Eteocretum urbem fuisse, ex qua adducebantur canes celeberrimi.* It appears as *Prassus* in a list of the villages of Sitia in a MS. at Venice, dated 1630 (Francesco Basilicata, *Relatione di tutto il Regno di Candia*, Library of S. Mark's, H. vii. 1683), and in an anonymous MS. *Descrittione dell'Isola di Creta* of about the same period. For both references I am indebted to the kindness of Mr. Gerola of the Italian Mission.

---

[1] Sieber, who was here in June, 1817 (*Reise nach Kreta* i. p. 361), heard of the site, which he calls *Preses*, but did not visit it. Pashley visited it in August 1834: he discovered and published the Praesos-Itanos boundary-inscription at Toplu monastery (*Travels in Crete*, i. p. 290). Spratt was here in the fifties, and published his book in 1865 (*Travels and Researches in Crete*, i. p. 164.)

[2] Professor Halbherr contributed an article on Praesos to the *Antiquary* for May, 1902, and a preliminary account of his excavations to the *American Journal of Archaeology*, ix. (1894) p. 543, and to the *Athenæum*, 1895, i. p. 812. A brief description by Professor Mariani will be found in *Monumenti Antichi dei Lincei*, vi. pp. 283–5; on p. 287 a useful map of the region to the East.

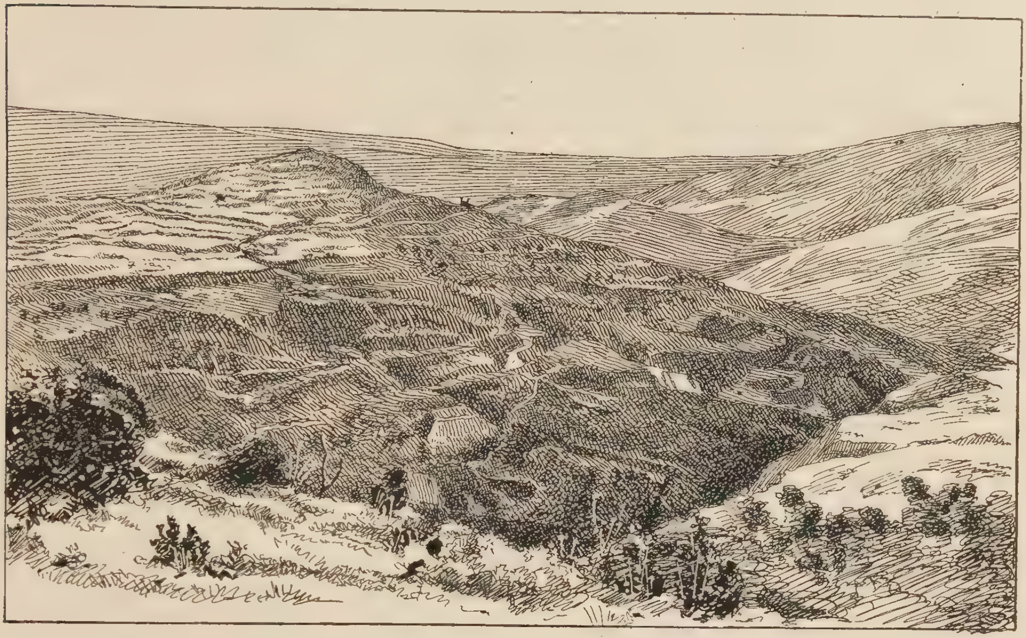


FIG. 1.—THE FIRST ACROPOLIS, FROM THE SOUTH-EAST.

## § 2.—THE SITE.

Praesos lies nearly midway between the north and south coasts of Crete, at the head of a fertile valley which runs inland due south for seven miles from Sitia, the capital and port of the easternmost *eparchia* of the island. The site of the ancient city is a rocky tongue-shaped plateau, almost enclosed by two streams which unite at its foot and form the Sitia river.[2] On north and west this peninsula descends in formidable cliffs, to the east it falls away gradually in a long succession of slopes and cultivated terraces. At its southern extremity the valleys converge so nearly that for a short distance the road follows a narrow ridge from which the fields drop sharply away at either hand. The plateau over which the ruins extend rises into three heights which we have followed Mr. Halbherr in calling the First, Second, and Third Acropolis.

---

[1] *American Journal of Archaeology*, v. (1901) pp. 371–392.

[2] The name Δίδυμοι, preserved as that of a river or rivers in Crete by the author of a metrical description of Greece (Dionysius Calliphontis in Müller's *Geogr. Gr. Min.* ii. p. 242), is appropriate to the two confluents of the Praesos-Sitia river and has been applied to it, but is better avoided. Diodorus (v. 75) mentions two islands called Dionysiades on the Cretan coast ἐπὶ τῶν καλουμένων Διδύμων κόλπων, evidently the islands called by sailors Giannitzades and by the country-people Διονυσάδες, off the gulf of Sitia.

The First Acropolis, the highest of the three, is the only one to which the name of Acropolis can be applied with accuracy. It is the apex of a triangular limestone hill, which forms the whole eastern face of the plateau. Fig. 1 shows it as it appears from the south-east. It was the citadel and centre of the ancient city.

The Second Acropolis lies north-west of and considerably lower than the First, with which it is connected by a level cultivated plot to which we gave the name of the Saddle. It was included in the wall-circuit of the city.

The Third Acropolis is another specimen of the same 'crag and tail' formation as the First. It is a flat-topped wedge of limestone which slopes up gradually from the north-west and falls away in steep precipices on the three remaining sides. It lay outside the walls of the city and may be more accurately named the Altar-hill, having been a frequented place of sacrifice from the seventh century onwards. Between Third and Second Acropolis there intervenes a broad arid gully, the only break in the cliff-wall which bounds the site on the west; between Third and First a trough-like depression, divided into olive-groves and fertile corn-fields, in which there is hardly a vestige of ancient masonry.

Our examination of the remains of the classical city showed that the houses rest everywhere upon the rock without any accumulation of *débris* such as usually encumbers the site of a prehistoric city. Consequently the assumption that the historic capital of the Eteocretans had held the same leading position in the Mycenaean as in the Hellenic period must be abandoned. The minor results obtained in the city and in the later cemeteries in 1901, and those of some subsidiary excavations to be undertaken in 1903, will be published in the next volume of the *Annual*. The present paper describes the traces of prehistoric occupation, the early cemeteries, the important sanctuary on the Altar-hill, and a Hellenistic house excavated on the First Acropolis.

## § 3.—THE CAVE OF *Skalais.*

Not far from the quarries at the north end of the Praesos plateau, and immediately above the gorge formed by the western arm of the Sitia river, is a cave which yielded the only neolithic and Kamáres pottery that came to light in these excavations. A difficult path from the cliff top descends to a shelf commanding a fine view of the rock-walls opposite, of the river winding through thickets of plane and oleander 140 feet sheer below, and of the fertile haughs at the confluence of the two streams. The cave is so well masked by a fig and a carob-tree growing at its mouth that few of the natives knew of its existence. Those who did called it ταὶς Σκάλαις.

The platform at the cave mouth is about 10 m. from back to front. There among fallen rocks we obtained a score of grey and brown hand-polished potsherds, much like those of the neolithic strata at Knossos. Within the cave we were only able to examine a part of the floor and that with difficulty, owing to the thickness of the stalagmite. It yielded some early Bronze Age pottery, in particular a clumsy mug of reddish clay covered with a black smear (Fig. 2) and a sherd with oblique sepia stripes on yellow, resembling the earliest painted ware of Syra: a few Kamáres fragments: some cups of a thin reddish ware which baffled me at the time but in the light of finds at Palaikastro are seen to be local products of the Mycenaean age: a plain semicircular

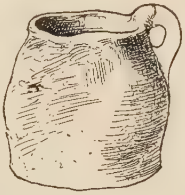


FIG. 2.—HAND-MADE MUG FROM THE CAVE (¼).

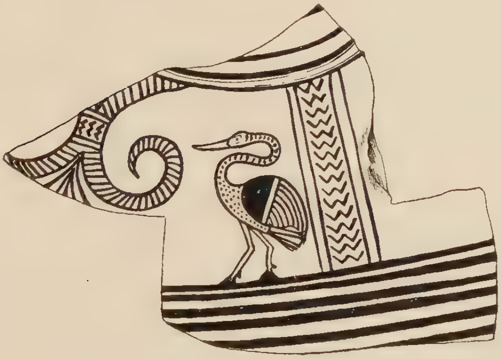


FIG. 3.—FRAGMENT OF GEOMETRIC VASE (½).

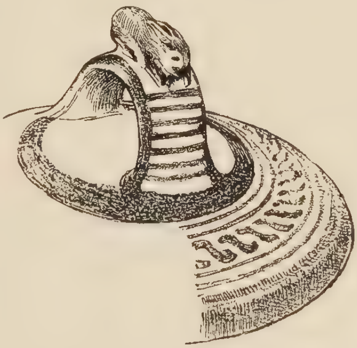


FIG. 4.—VASE-LID WITH FIGURE OF HARE (½).

bronze fibula like those from Kavusi (*A.J.A.* 1901, p. 136): and a quantity of geometric pottery, for the most part small vessels of types already familiar on other parts of the site. Fig. 3 represents a characteristic piece with what was evidently a symmetrical panel of two birds, and Fig. 4 a cover with a lifelike crouching hare upon the handle—a piece of naturalism unusual in the industrial art of the period.

The only bones found here in good preservation were those of a colony of badgers; the human remains were much scattered and decomposed.

## § 4.—THE MEGALITHIC HOUSE AT HAGIOS CONSTANTINOS.

(PLATE VIII, FIG. 1.)

I have already mentioned the two confluents of the Sitia river which enclose the site of Praesos. The eastern stream rises two miles from the First Acropolis in a remarkable perennial spring called Μεσαβρύσις or τοῦ Τζαννῆ ἡ φλέγα, which irrigates not only a number of gardens in the upper glen but a great part of the fields and orchards of Vavélloi. In classical days a little temple stood on the slope a few yards above the source, dedicated perhaps to the deity of the spring. Her goodwill was of some moment to the Praesians, for it was from here that they drew their water-supply. The old people of Vavélloi point out the general line of an ancient conduit of earthenware pipes, now in great part destroyed, which followed the curves of the hillside from the Μεσαβρύσις to the foot of the First Acropolis. Nowadays the irrigation system does not extend so far.

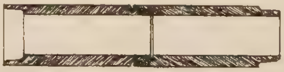


FIG. 5.—EARTHENWARE PIPES ($\frac{1}{20}$).

Strips of megalithic wall are noticeable at several points along the steep sides of the valley watered by this spring. Some of them may be no more than retaining-walls for cultivation terraces; the only one which we excavated proved to have formed part of a large house. It lies above and south-west of the spring, on a knoll crowned by some ruined cottages. The blocks which first attracted our attention are irregular cubes of limestone, measuring over a metre in each dimension. A second row of smaller blocks extending across a small plateau on the west may mark the limits of a forecourt. Close by stands the little church of Hagios Constantinos built in the shelter of a conspicuous tower-like rock. These features are seen in the photograph (Pl. VIII, 1), the bleached remains of the forecourt-wall appearing midway between the church and the right-hand edge of the picture, while the background is filled by the limestone heights overhanging the villages of Katsidhoni and Sandali. The top of the rock on which the man in the foreground is seated has been hollowed out into a primitive winepress. Details are given in Fig. 6. It lies 200 yards south of the megalithic farmstead, and may be coeval with it. If, as there is some reason to suppose, wine as well as oil was made and exported by the Mycenaean population of Crete, the culture of the vine may afford an explanation of the spread of their settlements from the coast-plains to the highlands of the interior, for in Crete the vine succeeds better in mountain districts than at sea-level, and vineyards are frequently planted at a height of 2000 feet above the sea. It is true that nowadays there are few vineyards on the uplands round Praesos, but this is because they have belonged for generations to the Moslems of Vavélloi. Nearer Khandra and in the mountain plains of Sitanos and Kataleone, and at several points in the chain of Peponas, especially at Orno, the remains of Mycenaean civilisation are found in close proximity to flourishing vineyards.

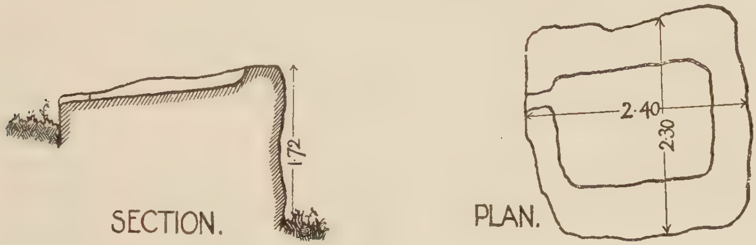


FIG. 6.—ROCK-CUT WINEPRESS AT HAGIOS CONSTANTINOS.

More excavation is required before we can speak positively as to the date of the megalithic buildings in the interior of the island. Their construction favours the supposition that some of them at any rate are contemporary with the megalithic houses of Palaikastro. In the present case the evidence for a Mycenaean settlement is furnished by the tombs. I picked up fragments of undoubtedly Mycenaean *larnakes* on the hillside known as ’ς τὸ Μαυρίκι, a few hundred yards from the spring, and was shown spots where complete specimens had been ploughed up. Considered along with the imposing Mycenaean tombs lower down the valley, these traces suggest that some of the adjoining megalithic walls may be the work of Mycenaean settlers. The house which we excavated here yielded little pottery. Some plain domestic ware of the Cretan Dipylon period

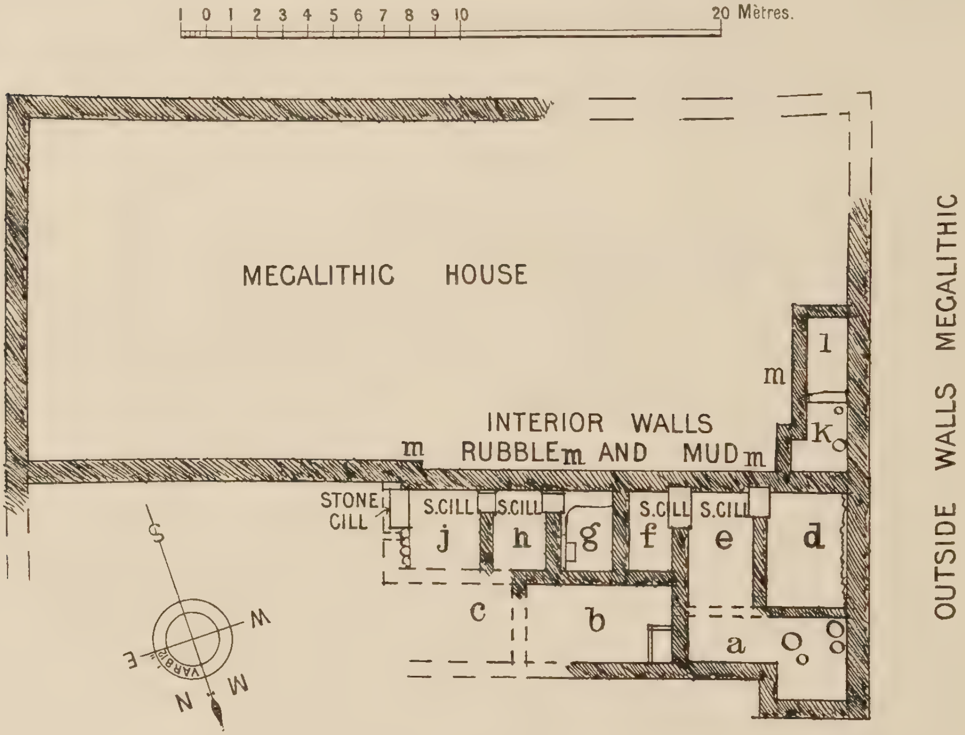


Fig. 7.—House at Hagios Constantinos.

was found in a basement room which also contained broken *pithoi* with ornamentation of sub-Mycenaean style, but it would be rash to lay much stress on the juxtaposition, for there were indications of a rebuilding in the course of which this cellar had been filled up. No painted ware was found, neither Mycenaean nor geometric.

Mr. Marshall, who superintended this excavation, has furnished the following detailed description.

The excavation disclosed the remains of two houses at different levels; the older had apparently fallen in or been destroyed, and on its ruins was built a later house of a somewhat different plan, but its traces were too scanty to allow of a restoration, and it has consequently been omitted in the drawing. The older building was better preserved; it was constructed in terraces sloping down to the N.N.E., but it is probable that the addition of upper storeys brought the roof of the whole to the same level. The room (*a*) may well have done duty for a basement cellar, for it lay lower than (*b*) or (*c*) of which the pavement was preserved at the same altitude as the flooring of the rooms behind to the South.

In room (*a*) were found large *pithoi* of coarse fabric with spiral and scroll designs and bands of perpendicular lines or cross-hatchings incised; by their side was some local ware of the characteristic grey clay with a rough sepia slip. In chamber (*b*) at the N.W. corner was a small oblong depression in the floor built round with uneven stones to a depth of about two feet, and containing 13 or 14 small "flower-pot" cups, several with burnt vegetable matter beneath them, and all showing some signs of fire.

In the S.W. of these chambers and on the same level as (*c*) and (*b*) were six rooms, leading one from another. The doorway in the fourth wall from the East was built in at a later time, and the threshold seemingly removed to the opposite side of the chamber (*g*) where it is marked in the plan. The thresholds of the other doorways remain *in situ*, firmly let in to the walls on either side. The lower portions of the jambs, massive blocks of stone some 3 feet in height, also remained *in situ*.

The first room (*j*) on entering from the East was paved over with irregular blocks of limestone of varying sizes, as also were the rooms marked (*b*) and (*c*).

The partition wall between (*h*) and (*g*) was rebuilt in the original house, an inner-wall with a circular corner being constructed inside the chamber (*g*).

At the fourth partition wall from the East the back wall (*m m*) was rebuilt out of the straight, and falling back at a slight angle towards the West. Southward again of this wall were two other chambers (*k*) and (*l*) of which the former contained one large pithos, with spiral decoration, together with other vessels of the common local fabric. These chambers were standing to the height of 5 or 6 feet. No doubt other rooms existed to the South and East at a higher level, but their plan is no longer traceable. The wall (*m m m*) is backed to its full altitude by virgin soil.

The inner walls of the house are built upon a foundation of natural round stones laid upon the clay subsoil, as large in size as the two hands could conveniently grasp. Upon these are set the roughly squared megalithic boulders, with smaller stones wedged into the interstices.

What the limits of the outer walls of this homestead were towards the north could not be determined. They may have extended in that direction to the rocky eminence upon which stands the church of Hagios Constantinos, and which is separated from the house by a shallow depression in the ground; similar remains in similar situations are to be remarked elsewhere among the hills of Eastern Crete, *e.g.* at Chordáki, at the *metoche* beyond Kalochorio (south-east of Apidhi), and at a site north of Perivolakia.

In the interior of the house between the chambers marked (*h*) and (*g*) was a later grave containing bones, some pottery of the common local ware, a small *aryballos* of early Corinthian fabric, a portion of a silver ring, a fragment of silver with hatched lines incised, a circular piece of bone with rough flutings, and an ivory disc. The existence of this grave at a period fixed within narrow limits by the presence of the Corinthian vase, when the later of the two houses had been levelled with the ground, gives the lower limit for the date of the original buildings. The higher limit is perhaps determined by the fact that there was no trace of anything Mycenaean in the houses, though this negative evidence may count for nothing if it be the case that the first inhabitants of the house belonged to a non-Mycenaean people of the interior. On the other hand, sub-Mycenaean survivals were apparent on fragments of *pithoi* found in the lowest stratum along with that peculiar local ware of grey powdery clay with a coarse sepia slip which has not, so far as I know, been found at an earlier period than the geometric in Crete.

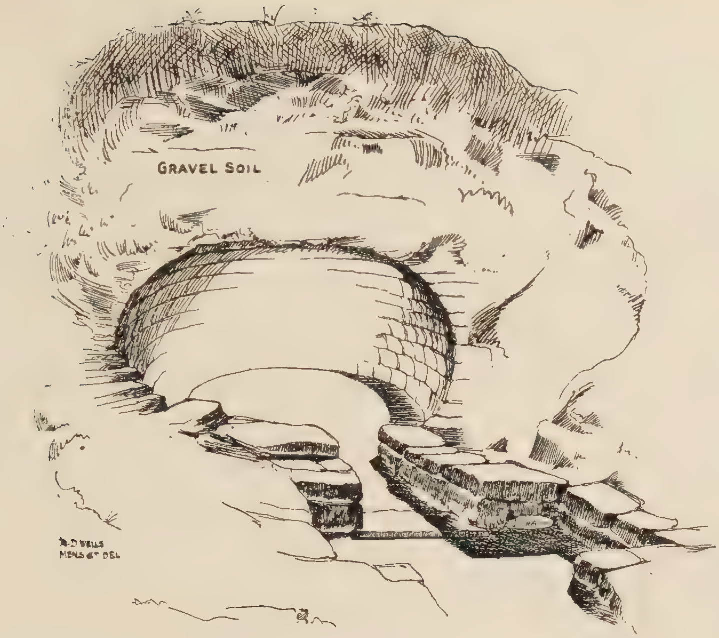
J. H. MARSHALL.

## § 5.—THE EARLY TOMBS. *A*.

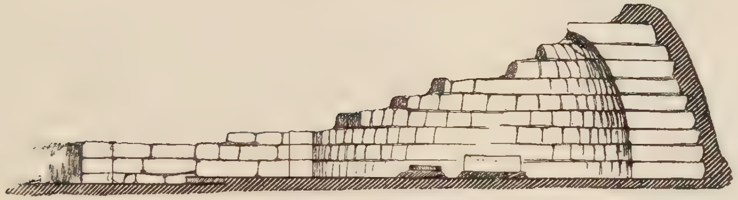
Tomb *A* is a large bee-hive tomb underlying the public road south-east of the Third Acropolis and east of the main cemetery. The clue that led to its discovery was the presence in the roadway of some huge wedge-shaped blocks, which proved to be part of the highest surviving course of the back-wall. The floor was found 2·60 m. below the surface of the road. East of it the tomb extends into a field at a lower level, and here the walls stand only half a metre high. The entrance is from the north-east through a short *dromos* cut in the subsoil, which leads to a feature unusual in such tombs, a vestibule 2·30 m. by 1·50. Beyond this is a low threshold and a passage ·85 m. wide through the thickness of the wall, which is about 1·60 m. at ground-level, and becomes less as the wall rises. The diameter of the circular chamber is 4·07 m. A rebate in the wall at either side of the entrance suggests that there was a door here and wooden door-posts. The material used is not the Praesos limestone but a soft white freestone quarried near Vavelloi; it is laid in regular courses about ·20 m. thick. The chamber was choked with the fallen stones of the roof; below them and ·35 above the original floor there was a hard trodden floor of earth and broken pottery; it seems that the tomb was discovered while still intact and inhabited or used for some agricultural purpose.[1] The discovery of a late silver coin of Itanos suggests that this may have

---

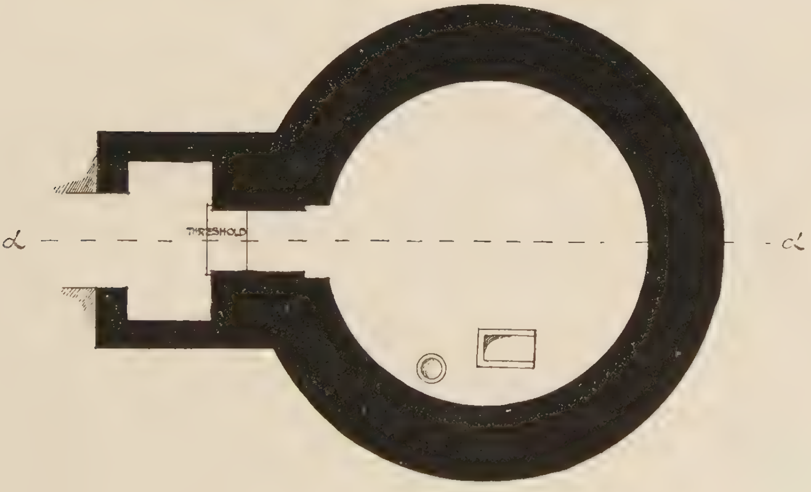
[1] To the right of the entrance are two blocks resting on earth containing broken pottery. One is a round drum ·51 m. in diameter, ·17 high, with a circular sinking on its upper face ·32 in diameter and ·04 deep. A similar stone was found near the entrance. Were these basins for libations? One of the geometric tombs at Knossos contained 'a cylindrical stone, 1 ft. high and 1 ft. 4 in. in diameter, with a central hollow 6 in. in diameter,' explained by Mr. Hogarth (*B.S.A.* vi. p. 83) as a funerary altar. The other is a rectangular block (·85 m. × ·50 × ·27 deep), with a raised margin on three sides of the upper surface, which is sloped away towards the fourth side, forming an inclined trough, ·05 m. deep at the upper or closed end, ·15 deep at the open end.



THOLOS TOMB "A".



SECTION αα.



PLAN.

FIG. 8.—BEE-HIVE TOMB AT PRAESOS.
(Scale 1 : 110).

happened in the first or second centuries B.C. Below this later floor-level was a tightly packed deposit of broken pottery and other objects mixed with red earth which showed the effects of fire. It became clear that the whole of this stratum had been dug over; the pottery was smashed and and the pieces scattered. It was for the most part coarse geometric ware of types already familiar. There was no Mycenaean or Kamáres ware. Although the whole of the deposit was dug out inch by inch with knives and the earth was afterwards sifted, no bones were found except some teeth (man, ox, and dog). I am inclined to explain the large quantity of pottery found here as the result, not of repeated interments, but of honours paid to the dead during several centuries of hero-worship, such as we know to have attached itself to the beehive-tomb at Menidi. The best-preserved vases were those found in the vestibule, in the recesses at either side, which seemed to have escaped the notice of the ancient excavators. Fig. 9 represents a small jug made of a thin, metallic ware; most of the decoration is in dark brown glaze laid on the drab clay, but the narrow white bands on the body are in *white* paint laid over the brown glaze, a technique which was common in East Crete and may have been a direct continuation of the method so popular there in the Bronze Age; a fine example of it occurred in Tomb *C* (Plate IX. *d*). The decoration of the cup (Fig. 10)

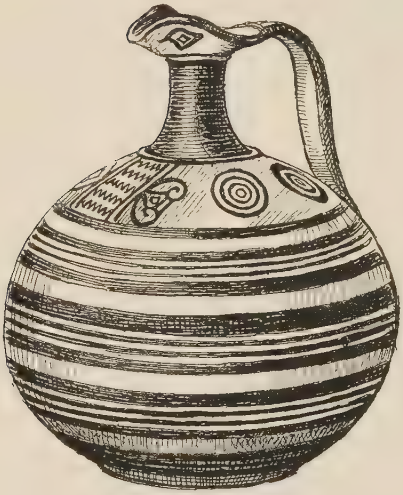


FIG. 9.—GEOMETRIC JUG FROM BEEHIVE-TOMB (½).

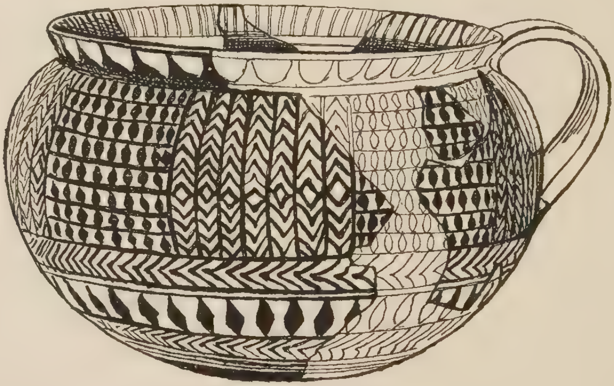


FIG. 10.—GEOMETRIC CUP FROM BEEHIVE-TOMB (½).

is made up of familiar elements, and succeeds in producing a certain richness of effect.[1] Associated with this group was a proto-Corinthian aryballos with elongated pear-shaped body.

Within the chamber no whole vases were found; the mass of fragments filled twenty-three baskets, but prolonged examination shows that very few can be put together. A great part of the original deposit had been dug out and scattered by the first excavators; our trial-pits on the slope below the Tholos came on *débris*, including pottery and scraps of gold-leaf, which seemed to have been thrown out at that time. The latest of the potsherds are two red-figured fragments, of no interest, and part of a standard-vase of the type sometimes called *plemochoe*. Part of an earlier vase of somewhat the same shape had the figure of a bull on it in high relief. A globular aryballos was the only specimen of Corinthian ware.

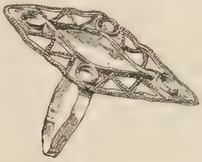


FIG. 11.—GOLD RING WITH GRANULATED WORK. (Length of bezel ·028).

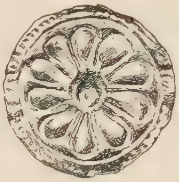


FIG. 12.—GOLD ROSETTE. (Diameter ·023).

Among the later geometric sherds there were numerous pieces of plates with low vertical sides, decorated on the exterior with large rosettes. One large fragment of this form, to be published shortly by Mr. Hopkinson, has a figure-subject both inside and out, on the outside a hero attacking a fishy monster, on the inside a horseman, drawn in outline in a very spirited sixth-century style.

Among the minor objects found within the chamber was a remarkable gold ring (Fig. 11) which has the bezel turned at right angles to the hoop, as is usually the case with Mycenaean rings; it is too frail for actual use and must have been made as a substitute for the ring worn by the dead man during his lifetime. The bezel is lozenge-shaped and has been cut out of a flat plate of gold. A lozenge-shaped cloison occupies the centre, and a small round cloison is placed at each angle; it is not clear how they were filled. The border forms a series of openwork triangles, and their margins are picked out with fine granulated work.

---

[1] Compare a vase from Anopolis published by Wide, *Geometrische Vasen aus Griechenland*, p. 12, Fig. 17.

Fig. 12 represents a disc of very pale gold in the form of a flower with ten petals. Numerous scraps and strips of gold leaf, with thread-holes showing that they had been attached to garments, were scattered through the deposit. Among the other objects were:

A fragment of ivory with a finely incised rosette and traces of red and yellow colouring.

A bone sword-pommel, original diameter about ·06 m.

Piece of a bone haft-plate with a gold stud attached.

Fragments of a bone comb, with incised ornament.

A small *Triton* shell.

A lentoid gem of steatite, the design obliterated.

An amygdaloid gem of cornelian with a meaningless wheel-cut design, somewhat resembling two fish, common on Cretan gems of the sub-Mycenaean age. (Cf. Furtwängler, *Die antiken Gemmen*, Taf. IV. 9 and 10).

The tip of a bronze knife or dagger.

Fragments of a plain hemispherical bronze bowl without handles.

A lozenge-shaped bronze plate, ·043 m. in diameter.

Twenty-three beads of glazed earthenware, much perished.

Thirteen small blue and yellow beads.

One cylindrical glass bead, banded with white.

Four wheel-shaped earthenware spindle-whorls with a cross-hatched zig-zag band on the rim.

One spherical bead with similar ornament

A small disc of striped blue and yellow glass.

Two spear-heads rusted into one mass.

A palette (?) of black slate measuring ·026 by ·020. Others were found in Tomb *C*.

A silver pin (Fig. 13) ·275 long, with a flat spreading head on which is a small rosette.

A bronze *fibula*, of the size and shape of a modern safety-pin, with three twisted strips of bronze wire bent about the pin.

The neck, lip and handle of an *oinochoe* of bright blue porcelain with a trefoil mouth. The form is almost exactly that of the bronze jug with riveted handle found in the Idaean cave (Halbherr and Orsi, *Antichità dell' Antro*, &c. Pl. xxi. 12).

The neck, lip, and handle of an *oinochoe* of black *bucchero*; of the same form as the preceding, with the difference that the handle of the porcelain jug has three shallow flutings, while that of the other is formed like two slender reeds set side by side. Not a fragment of the body of either jug could be found.

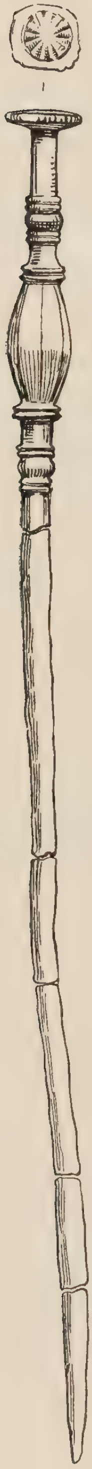


Fig. 13.—Silver Pin from Bee-hive Tomb ($\frac{2}{3}$).

The deposit had been so much disturbed that it is hard to identify the offerings which accompanied the original interment. Nothing was found which can be claimed as indisputably Mycenaean; the bronze knife, the much worn steatite lentoid, the hint of Mycenaean tradition in the form of the ring, are not conclusive. The sequence of the pottery shows that the tomb was known and frequented for many generations, probably as a place of cultus rather than of burial. The other offerings may be taken as evidence of an important interment in the early geometric period, but do not exclude the possibility that the first tenant of the tomb was a Mycenaean.

The juxtaposition of vessels of blue porcelain and of black bucchero is a fact of great interest. If the one material points to Egypt, the other points to Italy, while the likeness of both to the bronze jug found in the Cave of Zeus on Mount Ida suggests that they were imported at the period when Phoenician influence, as attested by the discoveries made in the Cave, was dominant in Cretan art and industry.

## § 6.—The Early Tombs. *B.*

Tomb *B* lies 250 yards south of the tomb just described, east of the road to Vavélloi, in a sloping field called Ἀρφανοπεριβόλια. A grave containing *pseudamphorae* had been found some years before in an adjoining garden; consequently we made some trials here; on July 3 one of our pits struck upon this tomb, a built chamber 2·50 m. square, entered from the north-west by a passage ·93 m. wide. The walls, nearly a metre thick, are built of irregular blocks of freestone quarried on an adjoining hill, laid in courses of varying thickness. The roof had collapsed; it had been formed of overlapping slabs, some of which remain in position at the farther angles. The perspective sketch (Fig. 14) shows how the courses were corbelled out. The two largest blocks are a door-jamb (displaced) ·46 × ·42 × ·95 m., and the lintel 1·62 × ·90 m.; the latter varies in thickness; like most of the blocks here it has been split, not dressed into shape. There had been at least three interments, the first in the Mycenaean period, the second in the geometric, the third in the fourth century B.C. The remains of the first were fragments of two *larnakes* and some gold ornaments: of the second, some coarse geometric pottery and stamped clay beads: of the third, several dozen iron swords and spear-heads, broken into small pieces, and a gold stater of Philip in excellent condition found near the door. Fragments of a marble standard-vase and of the moulded

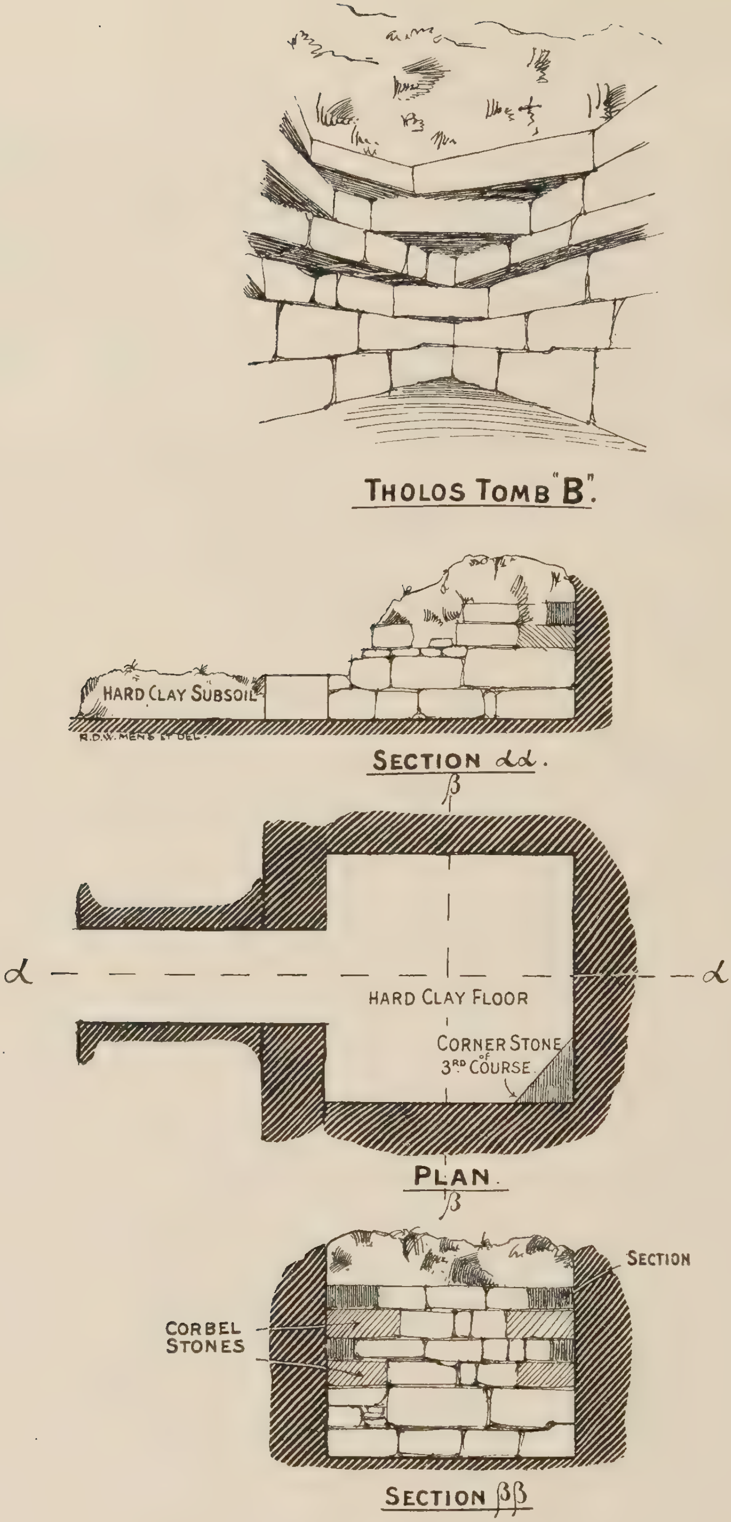


FIG. 14.—TOMB *B*. (Scale about 1 : 80).

base of a silver vessel probably belonged to the third interment. Only the Mycenaean objects merit a detailed description.

Of the two *larnakes*, one was shaped like an elliptical bath-tub, the other like a chest with a gable-lid; both forms are well-known in Crete. The former was decorated with meaningless serpentine curves in dark red paint on a buff slip, and measured about a metre by half a metre with a depth of ·55 m. The other had a spirited ornament of running spirals on one of the longer sides, also in dark red on buff. Of the ends and of the lid few fragments were recovered, but they make it possible to restore the form and design of the original (Fig. 15). It was ·92 m. long, ·43 wide, and about ·65 high without its lid. The clay of both *larnakes* resembles that of Palaikastro and must have been brought from the coast.

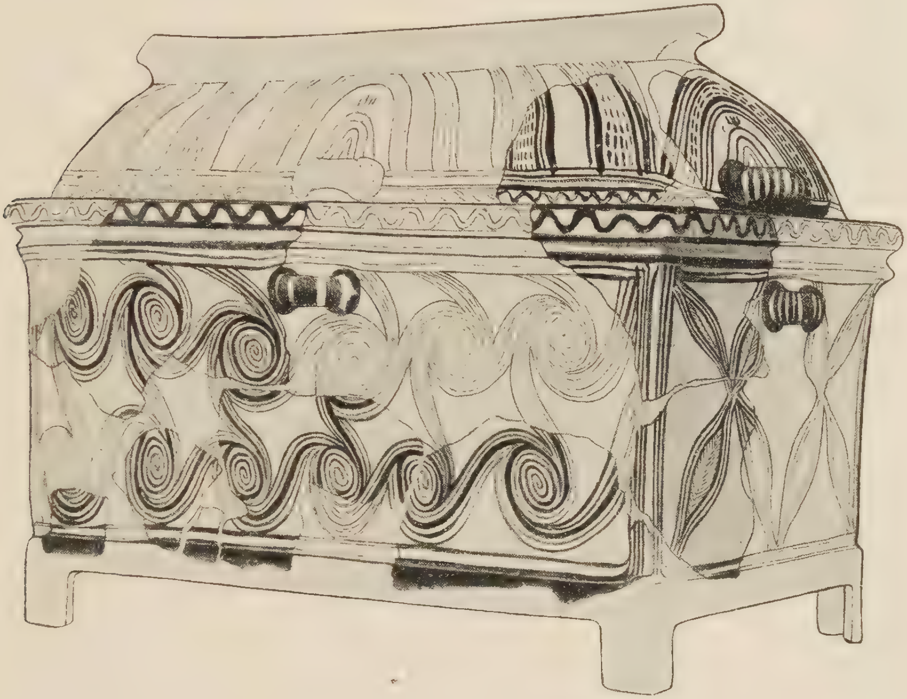


FIG. 15.—RESTORATION OF LARNAX FROM PRAESOS ($\frac{1}{10}$).

Of the gold ornaments the most important is the gold ring shown in Fig. 16. The elongated bezel is hollowed on the inside to fit the finger, and sloped away from the longer axis on the outside. A similar ring was found in Grave 37 at Ialysos and is now in the British Museum (Furtwängler and Löschcke, *Mykenische Vasen*, Text pp. 16, 17, Fig. 4). The ornament represented in Fig. 17 is formed of stout gold plate, the interior being hollow, and is pierced at the neck to serve as a pendant.

Tomb *B* also yielded a quantity of crumpled gold leaf, some of it impressed with concentric circles: and a crystal sphere ·023 m. in diameter, with a perforation ·007 in diameter running through it, which must be Mycenaean. I feel less certain as to the period of a tubular gold bead (Fig. 18). A gold ivy-leaf (Fig. 19) may have formed part of a wreath accompanying the latest interment, the remainder having no doubt been removed by the plunderers who ruined the tomb.

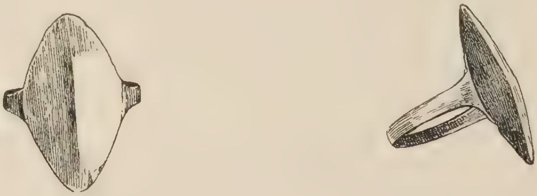


FIG. 16.—GOLD RING FROM TOMB *B*. (Length of bezel ·024).

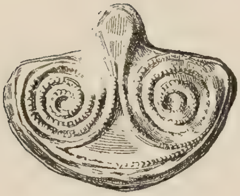


FIG. 17.—GOLD ORNAMENT FROM TOMB *B*. (Greatest length ·03).

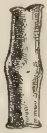


FIG. 18.— GOLD BEAD ($\frac{1}{1}$).

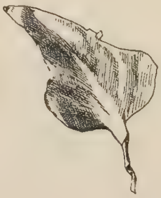


FIG. 19.—GOLD LEAF ($\frac{1}{1}$).

## § 7.—THE EARLY TOMBS. *C.*

(PLATE IX.)

West of tomb *A*, where a long gravel ridge rises between the public road and the Altar-hill, we discovered a cemetery containing tombs ranging in date from the early Iron to the Hellenistic period. The most interesting of the former class is a square shaft-grave (2·60 m × 2·30) sunk to a depth of over three metres through the gravel subsoil at the north end of the ridge. Denudation had reduced the depth on the eastern side, and it was from here that we approached the chamber. At least three interments had been made in it. The latest deposit, very near the surface, contained a poor four-handled 'Corinthian' bowl but no trace of bones; the second, 1·50 m. above the floor, consisted of a skeleton with feet to the north and the vases *a*, *b*, and *c* of Plate IX.; the earliest, of a skeleton laid with feet to the north on a stone bench, an iron sword at his right side, and upwards of thirty vases, among them Plate IX. *d*, disposed partly on the floor of the tomb and partly on the bench at his head and feet. The second skeleton was laid exactly above the first, a fact which may imply that not many years elapsed before the second interment, and that the position of the first was remembered. The lower part of the tomb is cut in the *kouskoura* (wrongly *Tuscara* in the illustration) or hard white marl which here lies below the gravel; the bench, ·70 m. high and ·50 wide, is of *kouskoura* covered with thin slabs.

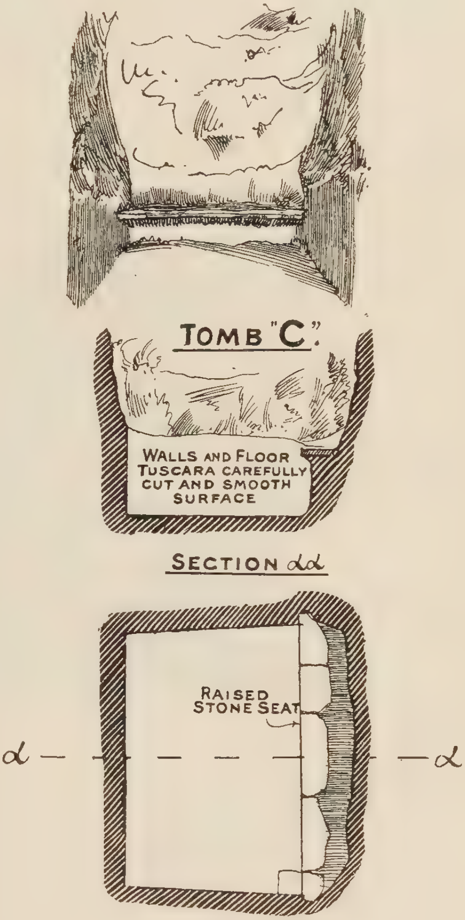


FIG. 20.—TOMB *C*. (Scale about 1 : 80).

The four vases on Plate IX. vary considerably in technique. Thus *a* is painted with brick-red on a powdery yellow clay: *b* with a paint varying from sepia through red to black: *c* with very fugitive black. The clay of *b* and *c* is well levigated, crisper and better baked than that of *a*, and of a pale buff colour. On the other hand *d* has *white* decoration on a thin black slip, the body clay being reddish.

As to form, I know of no Cretan parallel for the bird-shaped vessel. It is hollow and has a trefoil lip attached to the head, but the opening is so small that it cannot have been meant for practical use. Some analogy for the plastic form is offered by a vessel in the form of a seated nude woman with a *hydria* on her head, one of several score of geometric vases found last winter at Adhromyloi, to the south of Praesos.

The squat vessel, *b*, is a hydria, the vertical handle not appearing in the illustration. The find just mentioned contained a large vessel of nearly the same shape, and a smaller one with more tapering base and 'orientalizing' palmettes on the shoulder. The ring on the upper part of the neck is a continuation of the handle, copied from metal vases in which the handle actually clasped the neck of the vase; it appears also on the large *hydria* with mourning women and a chariot, found by Miss Boyd at Kavusi; and on *d* of our Plate. The draughtsman has omitted a small spiral which springs from the top of some of the rectangular gate-like figures on the shoulder of *b*.

The drawing of *c* represents it restored; on the original most of the paint has scaled off, leaving the design only faintly visible; but there is no doubt about the fidelity of the copy. The double side-handles have a shape that is familiar on the large Dipylon amphorae, but unusual on small vases. The ornament, like that of *d*, presents an interesting juxtaposition of rectilinear and curvilinear motives. The rosette springing from the base reappears on *d*; it is very common at Praesos and in East Crete generally. The pendent spirals on the shoulder furnish another link with the Adhromyloi find, which includes a vase-lid (of the type of *A.J.A.* i. (1897) p. 256 Fig. 4) decorated on the convex exterior with similar spirals, painted in the technique of *d*, however, with white on dark-red ground.

As for *d*, it belongs to an interesting class which goes far to disprove the current *dictum* as to the ugliness of Cretan geometric ware. Hitherto the best examples of it have been a series of five vase-covers (like the one from Adhromyloi already mentioned), found by Mr. Hogarth in tombs at Knossos; they are painted with rosettes, cable, concentric circles, spiral loops, and other curvilinear patterns. The jug with a delicate white scale-pattern on black ground from Kavusi, published by Miss Boyd in *A.J.A.* 1901, p. 146, is of very similar fabric.

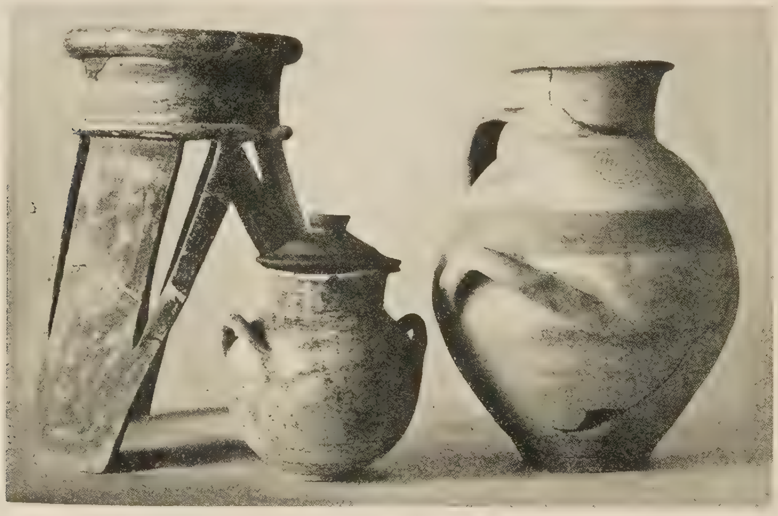


FIG 21.—VASES FROM TOMB *C* AT PRAESOS. (1 : 5½).

Tomb *C* yielded other examples of this technique, a miniature *hydria* (ht. ·10 m.) and *skyphos* (ht. ·06), and an open-work tripod or vase support (ht. ·32) which is shown in Fig. 21; on the legs of the latter there are traces of a white meander-pattern, on the two miniature vases concentric circles.

The little *hydria* and the tripod just described stood on the stone bench behind the head of the corpse. In the corner beyond them was a remarkable deposit, consisting of a large basin (ht. ·13 m. diam. ·35) in which were packed eight smaller vases, the miniature *skyphos* in the centre and seven small *lekythos*-like vessels, with round bases and flat narrow mouths, laid radiating from it, and of the slender jug *d* which was laid across the basin—evidently the toilet-furniture of the dead. The small vases probably contained unguents, the *skyphos* may have served for mixing them. The *hydria* shown in Fig. 21 (ht. ·29, with perfunctory decoration of thin concentric circles on buff ground) stood close by, and may have held the water for ablutions. Other articles of the toilet—two obsidian razor-blades, a pair of bronze tweezers, and three rectangular plates of slate (the largest ·038 m. × ·024, the smallest ·025 square) which may have been used as palettes, were found in sifting the earth of the tomb; their place in the deposit is unknown.

The little *stamnos* in the centre of Fig. 21 is typical of most of the remaining vases from this tomb. It is formed of soft yellow clay, covered with a sepia slip, and is without painted ornament. There are half a dozen one-handled cups of this presumably local ware, both large and small, two *skyphoi*, a crater, and a basin; the latter has a white wave-pattern on the exterior, the rest are plain. There is also a tiny *skyphos* of slate-coloured stone-like clay and a toy-jug with thin painted bands on the body (ht. ·05 m. and ·04 m. respectively.) Drawings of these vases will be included in a table of the forms of Cretan pottery which it is hoped to publish as a result of the recent work of the British School in the island.

The sword found beside the skeleton is ·50 m. long, including the hilt; a bronze stud is all that remains of its fittings; the top of the hilt is missing.

The only other objects in the tomb were ten clay beads (diam. about ·03 m., Fig. 22) and two clay spindle-whorls (diam. ·05 m.); they escaped notice in the caked gravel filling, and were found in the subsequent sifting. Probably they accompanied the second interment, with which no weapon was found and which is likely to have been that of a woman—possibly the wife of the warrior buried immediately below.

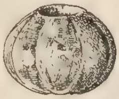


FIG. 22.—CLAY BEAD FROM TOMB *C* (½).

## § 8.—THE EARLY TOMBS. *D* and *E*.

Tomb *D* was the only indication of a Mycenaean settlement that came to light on the First Acropolis. It lies half-way down the north-west slope on the seventh terrace from the top, and is surrounded by remains of Hellenistic houses. It must have been discovered and plundered when they were built; yet by an extraordinary accident a precious part of its contents was preserved on the spot for us to identify. The tomb is an irregular oval chamber (Fig. 23) hewn in the limestone and entered by a very low doorway raised ·90 m. above its floor. Facing the doorway is a small recess (less regular than it is represented in the drawing), ·75 m. wide and ·46 high. The tomb itself contained only stones and modern refuse. Adjoining it on the north was the back-wall of a Hellenistic house built against the rock, and on the south a small bath-room, the floor and walls of which were lined with plaster. It appears that earth from the adjoining tomb had been used in making the mortar for these buildings, for on May 17, after heavy rain, one of our workmen spied a Mycenaean gem sticking, as he reported, 'like a snail' to the back-wall of the bath-room. The rain had detached some loose patches of plaster and dissolved part of the mud-mortar behind it. The diagram (Fig. 24) shows the relation of the tomb to the Hellenistic house; the builders seem to have incorporated it in their plan, perhaps turning it into a cistern. The gem is a somewhat large lentoid of yellow agate with milky white bands. The design, reproduced in Fig. 25 after a drawing by Mr. Gillièron, shows a couchant bull surprised by a hunter who seizes him by both horns. There is an exergue of horizontal lines above and below, with sprays repre-

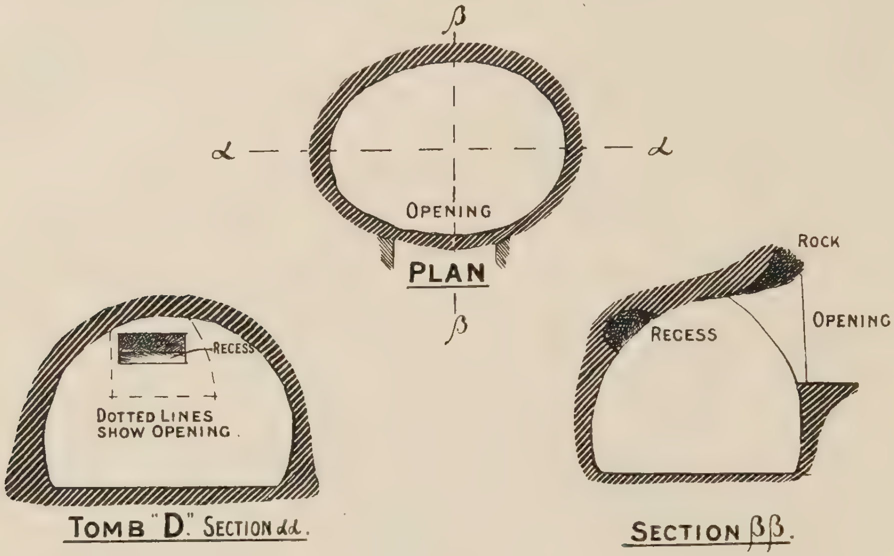


FIG. 23.—MYCENAEAN TOMB ON THE FIRST ACROPOLIS. (Scale about 1 : 80).

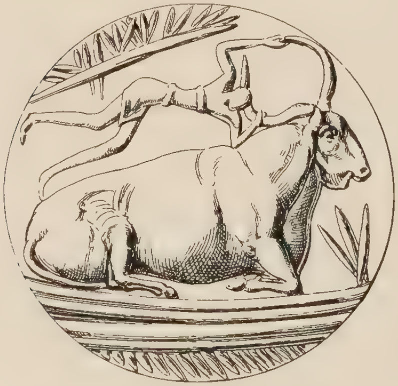


FIG. 25.—MYCENAEAN GEM FROM TOMB *D*. ($\frac{2}{1}$).

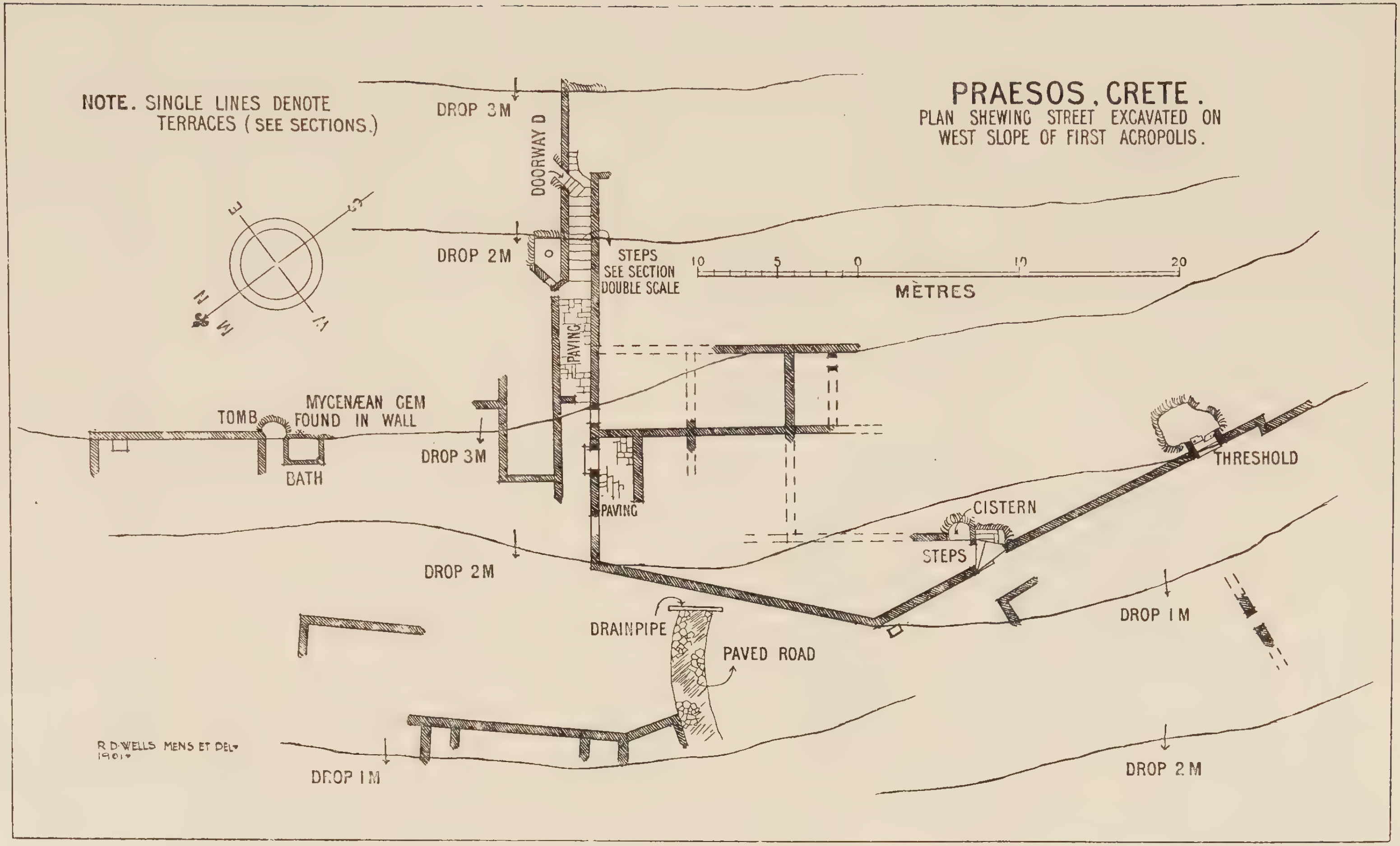

PRAESOS, CRETE.
PLAN SHEWING STREET EXCAVATED ON WEST SLOPE OF FIRST ACROPOLIS.
NOTE. SINGLE LINES DENOTE TERRACES (SEE SECTIONS.)
10
5
0
10
20
METRES
E
S
W
N
DROP 3M
DOORWAY D
DROP 2M
STEPS SEE SECTION DOUBLE SCALE
PAVING
MYCENÆAN GEM FOUND IN WALL
TOMB
BATH
DROP 3M
PAVING
THRESHOLD
CISTERN
STEPS
DROP 2M
DROP 1M
DRAINPIPE
PAVED ROAD
R.D. WELLS MENS ET DEL. 1901.
DROP 1M
DROP 2M

FIG. 24.—REMAINS OF HELLENISTIC HOUSES ON THE FIRST ACROPOLIS.

senting vegetation, and a tuft of grass before the bull's head. The man's figure is stiff and awkward; the bull is excellently done. It is noteworthy that the line of the bull's back follows that of a natural band in the agate. A comparison with the gems found in the Vaphio tomb, particularly with one representing wild boars couched in a swamp, reveals interesting points of contact.

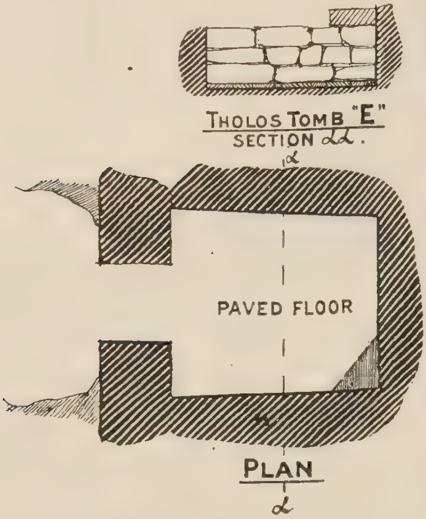


FIG. 26.—TOMB *E*. (Scale about 1 : 80).

Tomb *E* (2·20 × 1·84 m.) was discovered on the ridged top of a height called ’ς τὴν ‘Ρίζαν a quarter of a mile south of H. Constantinos and just outside the limits of the map. The entrance, ·85 wide, faces north. In construction it is a miniature copy of Tomb *B* with similar vaulting beginning at the fourth course. The floor is roughly paved. It was probably a Mycenaean tomb, but beyond earth and stones nothing whatever was found in or around it.

## § 9.—THE ALTAR-HILL (THIRD ACROPOLIS).

In this excavation both Professor Halbherr and the country people had been before us, under circumstances which I have already explained. The former had opened up a rich stratum of votive bronzes and terracottas under and round about a primitive altar, ‘built probably of earth, and surrounded by four walls or simply supported on two parapets at the two sides which look towards the declivities of the hill.’ These parapets, ‘composed of a single course of blocks standing on a very simple foundation of compact earth and small stones’ were destroyed by the peasants who dug here during the disorders of 1896. Professor Halbherr's clear description of the site and of his operations on it,[1] which had long been ready for the press, was not published until after our work was done and our plan engraved.

---

[1] In *A.J.A.* v. (1901), pp. 375-384. It should be noticed that in his plan (*Fig.* 6—*The Summit of the Acropolis C at Praesos*) North is turned to the left, East to the top of the page, while in our plan (Fig. 27) North is to the top. His plan includes the full extent of the hill-top

The chief object of our excavation was to search for further inscriptions in the Eteocretan language. The method adopted was to clear the whole hill-top, a plateau measuring 50 m. from north to south and 60 m. from east to west, bounded on three sides by precipices and easily accessible only from the north. It soon appeared that this north side had been closed by a wall of small stones mixed with mud-mortar, which at the east end loses itself among rocks and at the west returns so as to cover a part of that side which is less precipitous than the rest. Parallel to it at a distance of 2·70 m. to the south are the foundations of a similar wall, forming one side of a long building now in great part destroyed. Near the east end of the north wall is the entrance to the *temenos*, a passage 2·80 m. wide with a narrower doorway and three steps up; it was here, lying on the steps, that we found the Eteocretan inscription of which Professor Conway has kindly undertaken the publication in the present *Annual* (p. 125). Further down the hill, outside the *temenos*, there

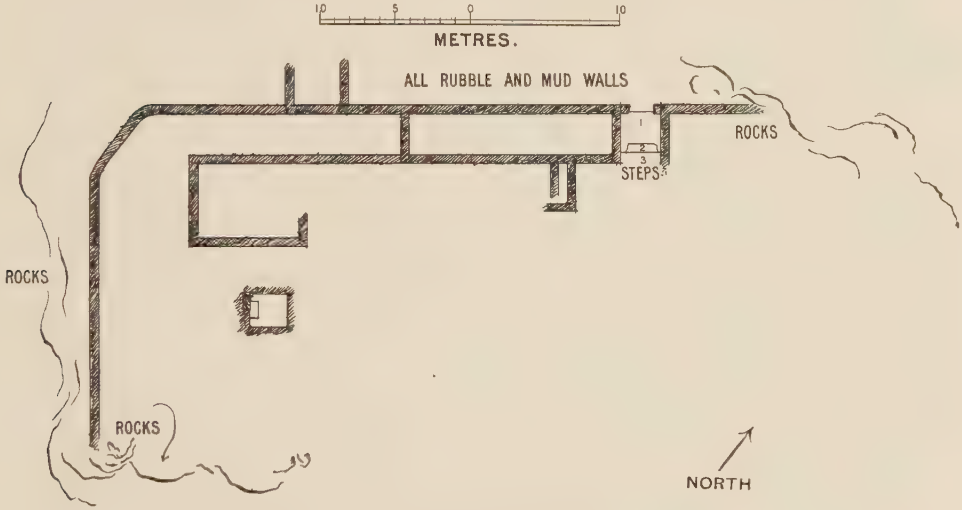


FIG. 27.—WALLS EXCAVATED ON THE ALTAR-HILL.

from North to South, omitting the western part; ours gives the full extent from East to West, omitting the southern part where we found no depth of earth and no remains. On our map of the site (Pl. VII) the *temenos*-wall has, by an unaccountable error, been made to face the precipice on the East instead of the slope on the North came to light fragments of Greek inscriptions in a still more shattered condition, and the mask of a huge life-sized terracotta lion of which other fragments had been found within the enclosure—speaking proofs of a violent and wanton wrecking of the sanctuary.

The pits dug by our predecessors lay south and east of this entrance; some of the freestone blocks that had formed the parapet of the altar were strewn about them. Here the votive deposit was exhausted, but south and south-west of the steps we came on undisturbed patches in which terra-cottas, bronzes and pottery lay mixed with burned matter and fragments of bone. We traced this deposit under the foundations of the buildings to the west and up to the *temenos*-wall, the foundations of which go down to the rock. There was no true stratification. So far as I could judge, the deposit had not taken its present form as the result of gradual accumulation, but was rather due to an artificial levelling of the ground and burying of old offerings undertaken when the *temenos*-wall and the inner structures, clearly contemporary with it, were built. The large terracotta heads of a lion and of a young man (Plate XIII.), which were dug out intact, greatly to the credit of our raw workers, come from this *stratum* of buried offerings. Fragments of the lion's body were recovered from points several metres apart; of the rest of the human figure not a trace could be found. Hence also came the bronze miniature armour, a considerable quantity of geometric pottery, an Attic *kleinmeister* kylix, and all the terracotta figures, with the exception of the largest lion. There was nothing which need be later than the fifth century in this well-defined black layer; on the other hand the fact that it extended under the walls on the west showed that they could not be earlier.

The evidence afforded by the excavation may be summed up as follows:—The principal *stratum* of terracottas, bronzes, and pottery, represents a cult which flourished from the eighth or seventh to the fifth century, and had for its centre a primitive altar on a bare hill-top.[1] The votive offerings most in fashion were on the one hand terracotta figures of men, women, lions and bulls, on the other, weapons and armour both real and miniature. We do not know how the larger offerings were deposited; some of the model helmets, cuirasses, and shields, had been slipped into crevices between or under the loose masses of limestone which encumbered the ground about the altar.

---

[1] The earliest object found on the hill is a steatite bowl, probably of Mycenaean date. There was no Mycenaean pottery, however, and the bowl may have been brought there at any time. Last year I found a similar steatite vessel, which had been discovered in an early grave, in use as a lamp in a church near Palaikastro.

The construction of the *temenos*-wall and inner-buildings, including perhaps the altar-parapet, may belong to the late fifth or early fourth century. The plainly-constructed inner buildings were stores for ἀναθήματα or priests' houses. When the sanctuary was finally ruined the chamber at the west end contained cauldrons of thin sheet-bronze—part, perhaps, of the sacrificial furniture.

Professor Halbherr argues that the cult which had its home upon the Altar-hill was 'a worship of ancient origin, practised without a temple in the midst of the wildness of nature.'[1] As regards the early period I believe him to be right, but there are indications that the *temenos* of the later period enclosed a small temple as well as an altar. Some architectural details (lion-head gargoyles, antefixes, and anthemia), which can hardly be interpreted otherwise, will be figured and discussed in the fuller publication of the terracottas. The only spot where a temple can have stood is a rectangle of levelled rock,[2] 13 m. by 9, in the south-east quarter of the plateau. If it be asked what has become of its materials, we may point to the squared blocks in the field-walls below, blocks of the same freestone as the altar-parapet, and conjecture with Professor Halbherr, who saw pieces of columns here in 1884, that they have fallen —or been thrown—from the overhanging plateau. The razing of the temple to the ground and the dispersion of its members may be imputed, along with the mutilation of the inscribed *stelai*, to the destructive fury of the foes who conquered Praesos somewhere about 140 B.C. and made it no more a city. Κατέσκαψαν Ἱεραπύτνιοι, says Strabo.

We have no means of determining to what deity the Altar-hill was dedicated. The prominent place taken by figures of lions among the votive offerings ought to furnish a clue; but as there is reason to hope that further discoveries may extend our knowledge of Eteocretan religion, it is better not to waste time in speculation. One of the terracotta antefixes bears a remarkable design of a woman in a Doric chiton holding a snake in either hand.

---

[1] *A.J.A. l. c.* p. 379.

[2] First discovered by Prof. Halbherr, who saw in it the meeting-place of a sacred assembly, or a place for ritual dancing.

## § 10.—THE BRONZES FOUND ON THE ALTAR-HILL.

Plate X. represents the best of an interesting series of votive models of armour.

*Helmets.*—Six complete and fragments of others. They all consist of two pieces of sheet-bronze cut and bent into shape, and rivetted together at the top and back. Five of them have a high crest and a small square face-opening. The sixth and largest is of true Corinthian shape with advanced cheek-pieces; it had a crest and the usual nasal, but these are broken off.

For this primitive type of helmet compare Conze, *Melische Thongefässe*, Taf. iii.

*Cuirasses.*—Ten half-cuirasses (γύαλα) and one complete example with breast-plate and back-plate still united at the shoulders. The latter, not shown on the plate, bears the same engraved ornamentation as one of the half-cuirasses found at Praesos by Halbherr. (*A. J. A.* 1901. p. 384, Fig. 13) consisting of a volute over each breast and an omega-curve below. Cuirasses of this form and engraved with this conventional pattern were used in Greece from the end of the seventh century. They are seen on the François-vase, on the Rhodian plate with the combat of Euphorbus and Menelaus, and on the 'Tyrrhenian' amphorae (Attic products of 600—650 B.C.), and are common in later black-figured pictures, but are superseded in the early part of the fifth century by the more elaborate cuirass with movable shoulder-pieces which was clasped at the front instead of at the sides. Pausanias x. 26. 2 notes that a θώραξ of this archaic type appeared in the Iliupersis of Polygnotus. One of the rare instances on a red-figured vase is Gerhard *A.V.* iii. 201.

*Loin-guards.*—Seven whole, besides many fragments. These semicircular plates have been found more often in Crete than on the mainland. The Candia Museum possesses a fine example, presented by M. Triphyllis of Rethymnos, with a group of figures engraved in sixth-century style. Six examples, the largest ·29 m. long and ·15 deep, came to light in excavations at Axos. They have sometimes been explained as pectorals, worn to guard that part of the chest which was exposed by the deep neck-opening of the *thorax*. I prefer a suggestion made by Furtwängler in publishing a large plain example found at Olympia (*Die Bronzen*, Taf. ix. 985, Textband iv. p. 158) that it was attached to the girdle of the *chiton* under the cuirass and hung like an apron to protect the lower part of the abdomen.

The Praesos loin-guards have three rings in their upper edge; in the specimen from Olympia the middle part of the upper edge is missing, but there is a ring at each end. A smaller example found at Olympia has small holes all round its margin, and seems to have been mounted on leather.

*Shields.*—Between thirty and forty bronze discs, whole and in fragments, some of which are certainly models of shields. I have reproduced at the bottom of Plate X. specimens of two common types, the one perfectly plain and slightly convex, the other with a narrow flat rim. A third type has a raised central *umbo*; one example occurred in the Dictaean cave and several in the cave on Ida. (*B.S.A.* vi. 109. Fig. 41. on right).

I have included in Plate X. two terracotta shields found in the same deposit. The larger, placed below the largest loin-guard, is quite plain, the other (above on the right) has two circles of red paint. Neither has any handle on the inside.

Besides these miniature offerings there were pieces of real armour—a Corinthian helmet, greaves, loin-guards and the central part of a shield decorated with concentric circles, all crushed and in miserable condition: the tapering butt of a lance (σαυρώτηρ) square in section and 17 cm. long (*Olympia*, *Bronzen*, Taf. lxiv. 1050), and parts of others, one of them round, (*ib.* 1066): three arrowheads: and tattered pieces of bronze plate, some of which may be the remains of full-sized cuirasses.

The remains of vessels include part of the ring-handle of a tripod, like that found on the same spot by Halbherr (*loc. cit.* p. 383 Fig. 12): a cauldron-handle and large shreds of cauldrons of hammered bronze: a vase-support in the form of a hoop with ovolo decoration resting on three claw-feet (cf. Carapanos, *Dodona*, Pl. xli. 112); and seven or eight little T-shaped objects, possibly vase-handles, like *Ol. Br.* Taf. xxxv. 666.

Among other bronze objects may be noted a hammer-head 7 cm. long: three olive-leaves which must have formed part of votive wreaths (cf. *Ol. Br.* Taf. lxvi. 1173): part of a fibula, (length preserved 11 cm.), the nearly semicircular bow expanding and becoming hexagonal in section: a fish-hook; a bodkin; a pair of tweezers; and a great number of plain rings, nails, and studs.

The only coins found on the Altar-hill are a didrachm of Cyrene and a base didrachm of Phalasarna (Wroth, *B.M. Cat. Crete.* Pl. xvi. 7, Svoronos, *Num. de la Crète*, Pl. xxv. 5).

Among the objects in other materials are the leg of a marble statuette (knee to ankle, ·10 m), two button-like discs and a toggle of bone, and part of an aryballos of striped glass.

The terracottas are discussed by Mr. E. S. Forster in a separate paper.

## § 11.—The Hellenistic House on the Almond-tree Site.

(Plates XI. and XII.)

This was the best constructed of the buildings which we examined within the town, and the only one that was well enough preserved to merit complete excavation. It is a compact block of irregular outline lying on the north-western slope of the First Acropolis, a few yards to the east of the saddle-like depression on which there is some reason to place the ancient Agora. Its front-wall, which owing to the declivity is a retaining wall, stands to-day three metres high, and the back-wall within the house is preserved to a height of two and a half metres. The ruins of insignificant houses on a lower terrace to the west had dammed back the covering of earth so effectually that not a stone of the existing building was in sight before the excavation, although scattered blocks of unusual size and finish attested that an important edifice had stood hereabouts. In the last week of May a trial-pit sunk through a threshing-floor struck upon an oblong stone tank, and a trench carried southwards from it exposed a doorway with massive jambs. Then a part of the imposing west front, worthy of a public building, came into view. (Pl. XII. 1.) Three weeks later, when a systematic search by means of trial-pits and trenches had failed to find any structure comparable to it in workmanship or preservation, I decided to clear it entirely, and this was done between June 17th and July 3rd. Care was taken so to dispose of the earth and stones as to improve the surrounding property, broad new terraces being formed on the slope below, which had been a mere moraine of tumbled ruins. In recognition of this betterment the Moslem proprietors, who had dealt throughout in a most friendly spirit, were content to name a nominal price for the freehold ; and the excavated area, twenty metres by thirty, was purchased, fenced in, and made over to the Cretan government. An old almond-tree growing in the south-west angle had afforded us shade during the midsummer heats. We were able to preserve its roots unharmed, and for many years to come its green boughs, a rare sight on that arid plateau, will guide the traveller to the monument which bears its name.

The coins found in the Almond-tree house range from the fourth to the second century B. C. A detailed list is given below. The peculiarities of its plan (see Plate XI.) show that the architect had to take account of existing streets ; he had to sacrifice regularity of plan in the smaller rooms, in order to make the large rooms 9 and 4 approximately rectangular. (See the Plan, Plate XI.) To the north-east he has encroached on earlier houses, while the houses on the lower terrace to the north-west are contemporary or of later date. It follows that the house does not belong to an early stage in the city's history. The pottery found in it, and the comparatively unworn condition of the thresholds, suggest the third rather than the fourth century as the period of its construction.

Its original destination cannot be determined. The massive carefully dressed masonry is such as we should expect in a public building rather than in a private house of so remote and poor a city. The doorways are considerably wider than those with which we met in other houses at Praesos. Was it a public guest-house or κοιμητήριον such as is mentioned by Dosiadas (in Athenaeus, iv. 143 b) in his description of the Cretan συσσιτία ?

Εἰσὶ δὲ πανταχοῦ κατὰ τὴν Κρήτην οἶκοι δύο ταῖς συσσιτίαις, ὧν τὸν μὲν καλοῦσιν ἀνδρεῖον[1] τὸν δ' ἄλλον ἐν ᾧ τοὺς ξένους κοιμίζουσι κοιμητήριον προσαγορεύουσι.

---

[1] The ἀνδρεῖον is mentioned in *C.I.G.* 2554, l. 51 (Treaty between Olous and Lato), and 2556, l. 37 (treaty between Hierapetra and Priansus).

All that we can say with certainty is that for some time before it was ruined and abandoned certain rooms were in use as an oil-factory. It may have been built as a summer residence by some rich citizen; the position of the largest room, 9, at the northern angle of the building, is significant of a desire to escape from the sun. But it seems more likely that it was originally intended to serve a public purpose, and then by some vicissitude fell into private hands, becoming little better than a farm-house.

Mr. Douglas Wells has furnished the following architectural notes:

> The main walls of the building are of ashlar, built in uneven courses, the blocks being drafted for about an inch and a half and faced with a chisel. The stone is a calcareous limestone, of a soft creamy tint when quarried, weathering to a very hard material of a grey-blue colour. Lime mortar has been used, but the joints are so fine that it is difficult to get the blade of a knife in between them.
>
> The partition-walls are built of rough rubble with a large proportion of mud. No bonding occurs either between them and the main walls, or with each other, there are straight joints in every case. The lower part of the walls at the back of the building is cut out of the solid rock on which the whole structure was laid.
>
> Patches of cobble paving remained, but the rest of the floor was either rock or a hard clay subsoil.
>
> The roof had been tiled, quantities of plain tiles and cover-tiles (see Fig. 28) being found over all the floors.
>
> The walls were finished on the inside with plaster.

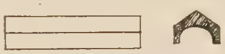


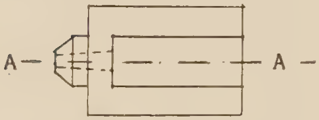
FIG. 28.

Ascending the rock-cut street 'P,' six feet wide, which mounts steeply from the Agora, we reach a point where a narrow lane branches off to the right; on the left is a paved recess which forms the forecourt of the house to be described. The street continues up the hill in a series of broad shallow steps, and is joined from the left by another, 'O' on the Plan, which skirts the back wall of the house. From the forecourt a doorway facing the street leads into the vestibule 7, and one on the right into the triangular room 5, while on the left a flight of eleven steps descends to a narrow basement and to room 6 opening off it, beyond which there is a cave-like cellar hewn in the rock below the little forecourt (see Section N–N); over 6 there may have been another room, of which no trace now remains, entered by a door opposite to the entrance of 5. This grouping of the entrances makes it practically certain that the whole block including rooms 1–9 formed one dwelling. It consisted of two separate parts, the series 7, 8, 9, 2, 1, which seem to have been living rooms, and 5, 4, 3, which were work-rooms. There was an upper storey, reached by a stair from 3.

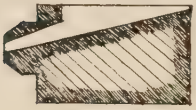
Before passing to the interior it will be convenient to describe some external features.

In the high front-wall of the house are two water-spouts, issuing from just below the floor-level of rooms 7 and 8, and discharging into the basement mentioned above. They are projecting bosses ·17 m. square with a champered face and round orifice, worked in the centre of ashlar blocks of the eighth course from the rock. This course is destroyed further north, but it is probable that the spouts were repeated at regular intervals. The wall below the southernmost of the two which remain is much weathered by the dripping water; it may have been the outfall of a sink in the adjacent corner of room 7.

In the same wall there are three beam-holes, cut about a metre apart, for beams ·25 m. broad and ·20 thick. Almost under the southernmost is a rebate in the base-course intended to receive a wooden post. They are rudely cut, crossing the joints between the courses, and evidently belong to some structure, posterior to the rest of the house, which was erected in the basement. (See Plate XII. Fig. 1.)



STONE WATER SPOUT ALMOND TREE



SECTION AA

Fig. 29.

Among the fallen blocks which choked the two narrow basements in front of the house were a waterspout and two window-heads, all in the same limestone as was used for the ashlar-work. They are shown in Figs. 29 and 30. To judge from the positions in which they were found, both windows belonged to room 9. They were ·35 m. wide, and had been furnished with wooden shutters turning on pivots like the doors. Here also were found some stone cornice-blocks.

Turning to the internal arrangements, we find nothing of interest in room 7 except a roughly hollowed circular mortar. The doorway between 7 and 8, the real front door of the house, is more carefully finished than the others, and the stone jambs characteristic of all Praesian houses are here more massive than usual. The threshold, details of which are given in Figure 30, is much like that of a late Hellenistic house at Delos (*B.C.H.* xix. Pl. V.). The position of the hole for the bolt shows that the right-hand half of the two-leaved door was opened first, as is also the modern practice. The sockets for bolts and door-pivots were fixed in wooden

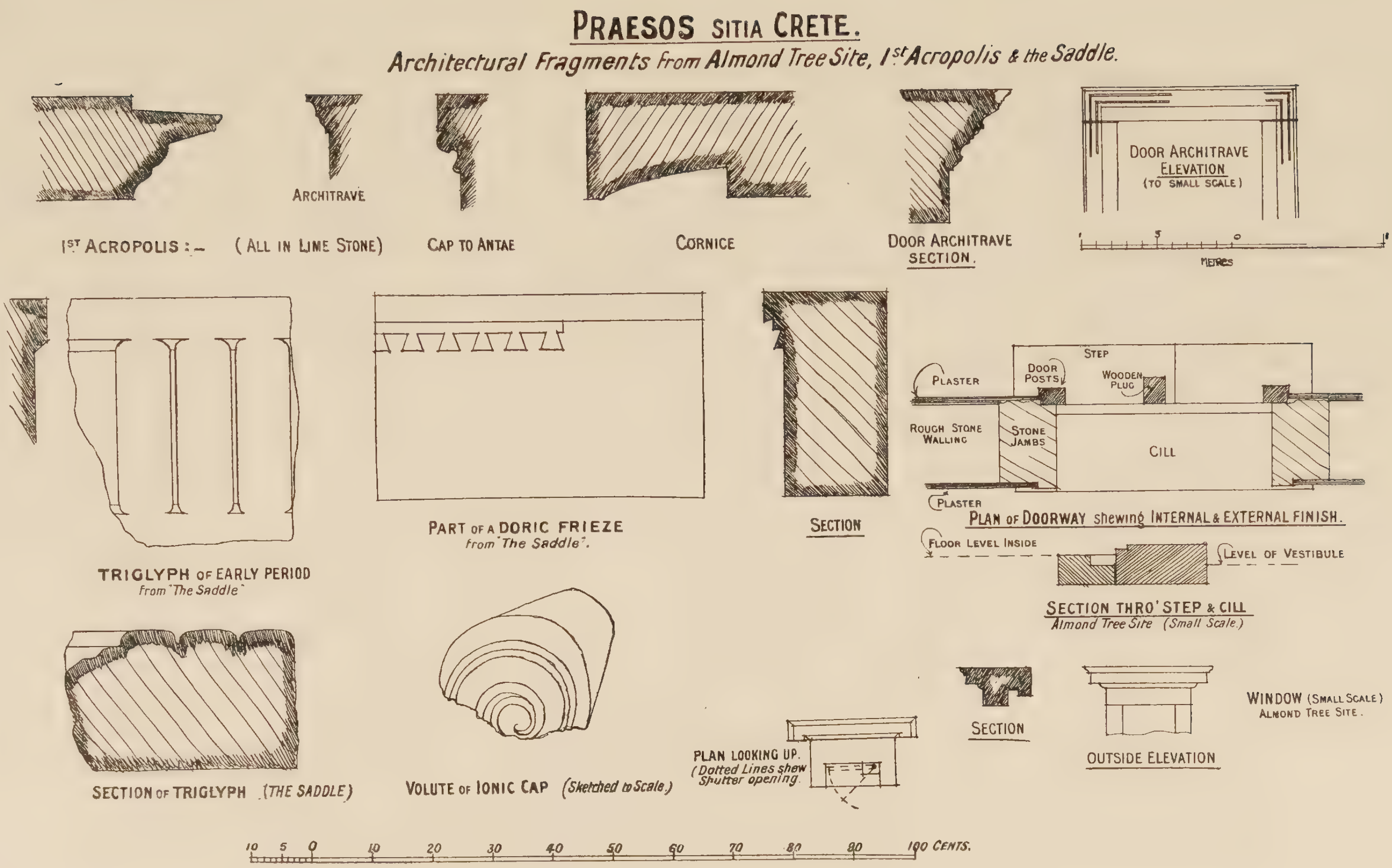

PRAESOS SITIA CRETE.
Architectural Fragments from Almond Tree Site, 1st Acropolis & the Saddle.
ARCHITRAVE
1st ACROPOLIS :–
(ALL IN LIME STONE)
CAP TO ANTAE
CORNICE
DOOR ARCHITRAVE SECTION.
DOOR ARCHITRAVE ELEVATION (TO SMALL SCALE)
5
0
1
METRES
TRIGLYPH OF EARLY PERIOD From 'The Saddle'
PART OF A DORIC FRIEZE from 'The Saddle'.
SECTION
STEP
DOOR POSTS
WOODEN PLUG
PLASTER
ROUGH STONE WALLING
STONE JAMBS
CILL
PLASTER
PLAN OF DOORWAY shewing INTERNAL & EXTERNAL FINISH.
FLOOR LEVEL INSIDE
LEVEL OF VESTIBULE
SECTION THRO' STEP & CILL Almond Tree Site (Small Scale.)
SECTION OF TRIGLYPH (THE SADDLE)
VOLUTE OF IONIC CAP (Sketched to Scale.)
PLAN LOOKING UP. (Dotted Lines shew Shutter opening.
SECTION
OUTSIDE ELEVATION
WINDOW (SMALL SCALE) ALMOND TREE SITE.
10 5 0 10 20 30 40 50 60 70 80 90 100 CENTS.

FIG. 30.—ARCHITECTURAL DETAILS.

plugs. There is a similar sill with three mortices in the doorway between 4 and 5, and another belonging probably to the door of 7 was found in the forecourt.

Room 9, the largest, measures 10·40 m. by 8·70 and was the principal living-room. The cross-wall marked on the plan does not now project above the clay floor; being better finished on the south side it seems to indicate an original difference of level between the floor near the entrance and the larger area beyond, which formed a dais rising about six inches above it; a later levelling-up obliterated this arrangement. A mass of broken pottery was found in the south angle of this room, chiefly pieces of large storage-jars; they did not form complete vessels, but had been brought there for some purpose as fragments. Similar jars, which had been in use when the house was abandoned, were found in rooms 8, 9, and 2, crushed by the fall of the roof. The wall separating 2 and 1 is a late addition, perhaps contemporary with the blocking-up of a doorway in the north wall of the former.

Returning to the entrance and crossing the triangular vestibule we reach a large room, 4, which has a door-sill resembling that of 8, and measures 9·60 m. by 8·35 m. A low platform about 1·10 m. broad and ·20 high seems to have extended all round the room; the surviving parts of it are the stone slabs marked in the Plan. In the middle are remains of an oblong tank or vat, wrongly described in the Plan as an *impluvium*; the ends are destroyed, but the sides, each formed of a single slab, are still in position; the floor consists of cobblestones bedded in clay. It was surrounded and strengthened by a stone plinth ·32 wide and ·25 high, two blocks of which are still in place. A use for this receptacle is suggested by the presence of an oil-press in the same room; it may have been a vat for the storage of oil, for which purpose it would probably be lined with lead. A rebate along the rim of the side-slabs shows that it had a wooden lid, such as would be necessary for the protection of the oil from dust. Internally it measured 1·50 m. in length, 1·05 in width, and nearly ·40 in depth.

The position of the oil-press is determined by two beam-holes in the wall, to the right of the entrance. A stone press-bed was discovered close by on the raised platform already mentioned; the plan (Pl. XI.) shows it in the position in which it was discovered, with its spout turned towards the corner. On it lay a small greenstone celt which was certainly left there when the house was abandoned. It may have been picked up and preserved as an amulet. If so, it is an interesting indication of superstitious ideas attached to ἀστροπελέκια in Hellenistic times.

Figure 32, sketched by Mr. Comyn, shows the press-bed replaced on a block found *in situ* under the beam-holes, but it is clear that a part of the substructure is missing and that the press-bed when in use was raised nearer to the beam. The apparatus was of the kind described by Messrs. Paton and Myres in *J.H.S.* xviii. 209—217. The press-bed, a neatly worked circular slab of limestone ·74 m. in diameter, has the usual ring-channel on its upper surface deepening towards the point where it issues through a heart-shaped spout, which projects ·09 m. The narrowness of the margin surrounding the sunk ring-channel distinguishes this example from most of those described by Messrs. Paton and Myres, and suggests that the olives pressed on it were not packed in bags, as was and is a common practice, but in folded squares of grass-fibre such as are still used in Crete and bear the name of μαλαθούνια. The packer works at a raised counter, and it is astonishing to see with what speed he fills the outspread cloth with a flat cake of olive-pulp, previously crushed in a horse-mill,

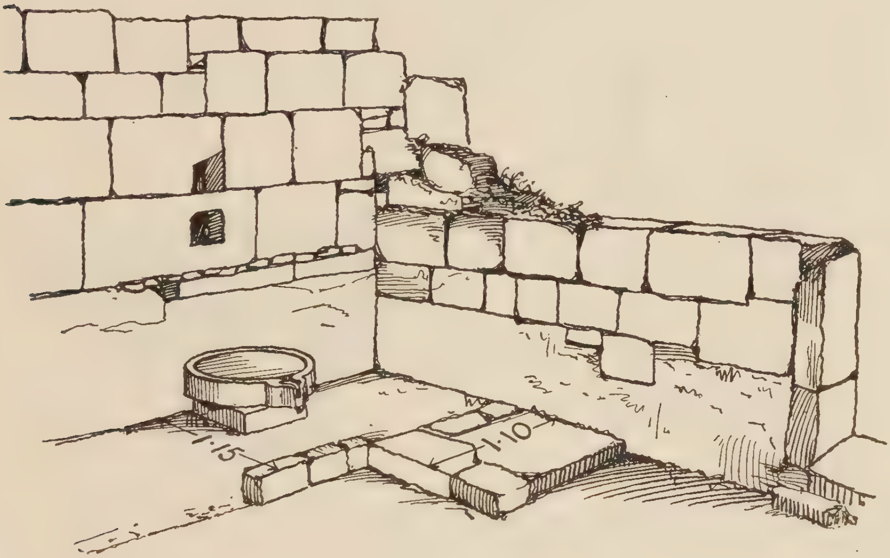


FIG. 31.—OIL-PRESS IN ROOM 4.

drenches it with hot water, folds over the corners envelope-fashion, and piles them a dozen at a time on to the press-bed, called *κατωμαγγάνα*. This method seems to have been used in Attica about 500 B.C. Mr. Cecil Smith recently published a black-figured vase on which two men are depicted forcing down the beam of an oil-press (*Forman Collection Sale Catalogue*, No. 323). The drawing (Fig. 33) which his kindness allows me to republish here shows that the mass between the press-bed and the beam is divided by eight horizontal white lines; I have very little doubt that they represent just such a pile of flat envelopes as I have described.

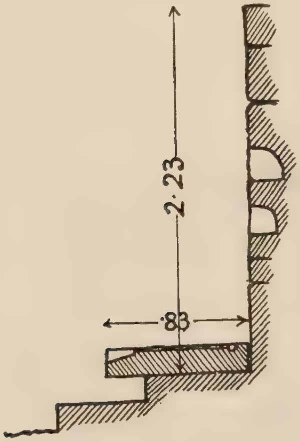


Fig. 32.—Oil-Press in Room 4: Section of Wall and Press-Bed.

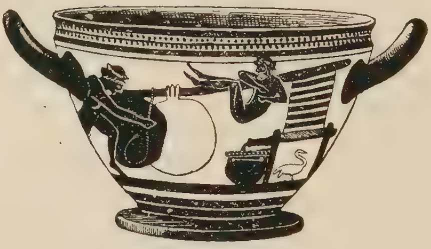


Fig. 33.—Athenian Vase with Scene of Oil-Pressing.

The form of our press-bed makes it probable that the same method was in vogue at Praesos in the second century B.C. But there is evidence that a different one had been in use not long before.

On the outer faces of the two slabs already described as forming the sides of the vat in the middle of the room there are cut certain channels which prove that they were once united. Fig. 34 shows how they would appear if placed in juxtaposition. Together they compose an oblong press-bed furnished with a circular channel spout of the usual kind besides some subsidiary channels intended to prevent the escape of oil which overflowed to either side. The slab has not only been sawn in two, but curtailed in length; it is evident that the small channel on the right is only the end of a diagonal drain which extended much further, and it is probable that something has been cut off at the left hand also. It must have sloped forward, so that the escaping oil tended to run to the front; the subsidiary channels were contrived to intercept and conduct it to a point near the principal outfall.

It is not unlikely that this cumbrous oblong slab was displaced in favour of the handy and portable circular press-bed in consequence of the introduction of a new method which was more effectual in confining the olive-kernels to the central area (diameter ·48 m. in the round press, ·63 in the large one) and made it unnecessary to guard against an overflow. The older method may have been to crush the olives in a single bag which would spread out under pressure—hence the wide margin; the improvement may have lain in the adoption of cloth envelopes. These would occupy more place vertically than the single bag and might necessitate the raising of the beam-hole; hence perhaps the second beam-hole seen in Fig. 31. The old press-bed was turned to account in the construction of a vat, probably for the storage of oil; we have seen that it was provided with a lid, which, as modern experience shows, is indispensable for the exclusion of dust. I have refrained from speculating on the means by which the pressure was applied. In the vase-painting a man is seen tying two huge weights to the end of the beam, while another has added his own weight to it, clinging in mid-air. The combination of beam and screw figured by Messrs. Paton and Myres (*loc. cit.*, p. 210) seems to be mentioned by Pliny in his obscure description of

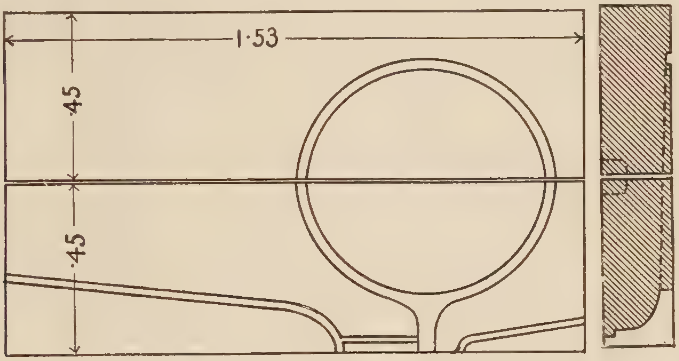


FIG. 34.—PLAN AND SECTION OF OLDER PRESS-BED.

oil-pressing machinery (*N.H.*, xviii. 317) as having come into use about a century before his own day. He calls it *Graecanica*; it may have been known in the Levant considerably earlier than in Italy, and it is possible that a large block with a deep round mortice in the centre of its upper surface, placed on a raised platform in the other side of the doorway of room 4 and marked *stone buttress* on the plan, may have played a part here.

Room 9 had been used as a store-room and contained remains of numerous *pithoi*. To the right of the door was found a well-preserved group of three large vases (Pl. XII. Fig. 2, foreground, on the left), a broken *pithos*, an amphora with pointed base, and the two-handled jar shown in Fig. 35. It is pail-shaped, and has a projecting spout flush with its bottom. There can be little doubt as to its use. In the modern process the olive kernels, before being pressed, are drenched with hot water, and the product after pressing contains more water than oil. The oil in due course separates itself and rises to the surface, and it is necessary either to bale it out from the top or to drain away the water from the bottom. The former method is slow and primitive; I was surprised to see it practised last November in he province of Mylopotamo. The latter is in general use, large and complicated separating-tanks being constructed on this principle; the Praesos jar illustrates the simplest form of it, in which after the contents have been allowed to stand some time, the tap is set running and the

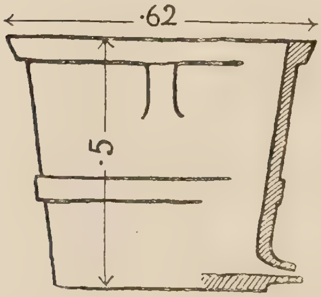


FIG. 35.—OIL-SEPARATOR FROM HOUSE AT PRAESOS.

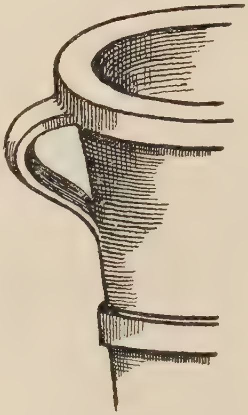


FIG. 36.—OIL-SEPARATOR: SKETCH OF HANDLE.

water escapes, a watcher being ready to stop the flow and change the recipient as soon as oil appears.

From this room a staircase ascended to the upper floor, or to the roof. The three lowest steps were of stone, ·90 m. wide ; the remainder were no doubt of wood.

*Minor Finds.—Pottery.* Fragments of coarse *pithoi* were numerous in rooms 3 and 9. The former yielded the only inscribed potsherd, part of the rim of a jar which had an aperture at the mouth of about ·35 m. The rim itself is ·05 wide and has the name

˥ΑΝCΩΝΟC

deeply incised on its upper surface in letters ·025 high. The mutilated letter is certainly a Π ; it is impossible to say whether others preceded it, since in spite of repeated search no other fragment of this rim was discovered. The finer wares were almost wholly wanting. Besides one fragment of red figure and one of geometric pottery, which had drifted in with earth from the slopes above, there were a few bits of Hellenistic black-glazed cups and plates, and one fragment of this ware with a female head in high relief.

*Coins.*—The diameter is given in millimetres.

1. Æ 25. Aptera. *Obv.* ΑΠΤΑΡΑΙΩΝ. Head of Artemis r. The artist's name ΠΥΘΟΔΩΡΟΥ is just legible. *Rev.* ΠΤΟΛΙ ΟΙ ΚΟΣ. Warrior, armed with helmet, cuirass, shield and spear, standing l., raising his r. hand towards a tree. Wroth, *Brit. Mus. Cat. Crete, etc.*, p. 8 (1), Pl. ii. 3. Svoronos, *Numismatique de la Crète Ancienne*, p. 15, (5), Pl. i. 10.

2. Æ 19. Itanos. *Obv.* Helmeted head of Athena l. *Rev.* Eagle l., looking back, in incuse square. Svoronos p. 204 (26), Pl. xix. 12.

3. Æ 13. Itanos. *Obv.* defaced. *Rev.* Star.

4. Æ 20. Praesos. *Obv.* Female head l. *Rev.* Bull's head. Svoronos p. 292 (48), Pl, xxviii. 18.

5. Æ 19. Praesos. *Obv.* Female head r. *Rev.* Bull's head. Svoronos p. 292 (46), Pl. xxviii. 17.

6. Æ 15. Praesos. *Obv.* Head of Apollo r. *Rev.* ΠΡΑΙ CΙΩΝ Thunderbolt. Svoronos, p. 292 (49), Pl. xxviii 20. Wroth, p. 72 (16), Pl. xviii. 5.

7. Æ 15. Thebes. *Obv.* Buckler. *Rev.* Cantharos.

*Bronze.*—Neck and foot of a small oinochoe. Socketed arrowhead, ·042 long. Socketed hook (from a spindle?). Stud with flat round head, from one margin of which projects a small loop. Disc, ·15 m. in diameter, ·001 thick, with lead rivet at centre. Bolt ·05 long and ·012 thick. Four nails, respectively ·13, ·05, ·05, ·045 long. Numerous broken nails and miscellaneous fragments. Disc ·07 in diameter (mirror-cover?). Small figure of couchant lion, ·09 long, pierced through back and head. Conical bolt-head, with remains of iron bolt.

*Lead.*—Massive rivet, used for mending a *pithos*.

*Glass.*—One fragment of a vase. 21 large and small blue beads, mostly dark blue. Two long cylindrical beads. Fragments of an intaglio of glass paste.

*Miscellaneous.*—Pieces of resin (for sealing jars?). A water-worn pebble of singular form, pierced for suspension. Marble knob, probably from the lid of a pyxis. Three fragments of rock crystal and six of obsidian. Four minute discs of polished bone. Two stone beads. Part of an amygdaloid cornelian intaglio of the common sub-Mycenaean type with a decoration of meaningless wheel-cut lines.

R. C. BOSANQUET.

# PRAESOS.

## THE TERRA-COTTAS.

(Plates XIII.-XIV.)

### § 1.—Introductory.

THE large find of terra-cottas made by the British School in 1901, and now in the Museum at Candia, having been handed over to me by Mr. Bosanquet for publication, I hope at some future date to give a more detailed and critical account of them. Meanwhile my object here is to give a short account of the find as a whole, dealing at greater length with only a few of the larger and more important discoveries.

On two occasions previous to 1901 excavations had been made at Praesos resulting in the discovery of a large number of terra-cottas. Before the Cretan Revolution Prof. F. Halbherr carried out a short excavation[1] on two sites, one on the Altar Hill (called by him the 'Third Acropolis'), the other near the fountain at Vavélloi. Secondly, during the Revolution the peasants made extensive diggings on the same sites and sold their finds which have thus become scattered; a large number, however, were bought by Ambrosius, Bishop of Hierapetra, who has generously presented his collection to the Candia Museum.

In 1901 the British School made more extensive diggings on the two sites where Prof. Halbherr had discovered terra-cottas. Of these the Altar Hill yielded larger and more important discoveries than anything he had found, while the site at Vavélloi yielded as before a large number of characteristic plaques. On two new sites also discoveries of terra-cottas were made. First in a trial pit on the fourth terrace below and to the west of Acropolis I, specimens of the same types of plaques as were found at Vavélloi, and a few other objects were discovered; secondly, a small shrine at the source of the east branch of the Sitia river, called by the natives *Μεσαβρύσις*, yielded a series of *ξόανον*-like female figures.

---

[1] For an account of this excavation see *American Journal of Archaeology*, Vol. v. (1901), pp. 371–392 (Plates XI. and XII).

## § 2.—TERRA-COTTAS FROM THE ALTAR HILL.

The discoveries of terra-cottas on this site include none of the plaques so numerous elsewhere: the site is most remarkable for the number of large figures which it yielded. Of these the most interesting is the bust of a young male figure (Pl. XIII. Fig. 1). The upper part of the body is intact and in excellent preservation, but the lower half has entirely disappeared. The height of the fragment being 26 in. and the width across the shoulders 28 in., the scale is, roughly speaking, three quarters the size of life. The terra-cotta is of a dark brick-red colour, the material of which most of the larger figures from Praesos are made: there are a few traces of a fine slip of pale clay.

The rendering of the face presents in the main the usual characteristics of Archaic Greek sculpture. The forehead is broad and well modelled; the eyebrows are set unnaturally high above the eyes; the nose is straight and well formed. The eyes are not yet represented in profile, but merely scratched in outline with a sharp instrument on a sloping surface between the nose and temples, and no attempt is made to render the eyeballs. The artist has not yet grasped the fact that it is through the rendering of the eye that most expression can be imparted to the human face. He has rather sought to produce a lifelike expression by the treatment of the mouth. The upper lip is straight and well formed, particular care being bestowed on the rendering of the philtrum; the lower lip is arched so as to leave the mouth slightly open, though the artist has not thought it necessary to render the teeth. A heavy furrow in the flesh runs down from the side of the nose and meets a smaller depression near the corner of the mouth. It is these lines which give the face its benevolent, though somewhat vacant expression. The modelling of the chin is perhaps the most striking point in the face: it projects to a very marked extent, and is divided into two parts by a deep depression. The first characteristic can be paralleled in a figure from the series of female dedications; the second is an exaggeration of the depression of the bone which exists in nature, but is not in most cases visible under the coating of flesh. It is difficult to say whether the chin is thus rendered because the artist wishes to display his knowledge of anatomy, or whether these marked peculiarities really existed; the former seems the more probable supposition. The form of the ears is conventional and no channel is represented which could convey sound to the drums of the ear. They are decorated with circular earrings.

The forehead is bound with an ornamental fillet, consisting of two bands decorated with incised lines and fastened together at the top, connected with a band which runs across the back of the head from behind the ears. This ornament seems to represent a fillet of gold leaf covered with a feather-like pattern, imitating a leaf or fern, with a joint or hinge in the centre, such as would be required by the rigidity of the material. From under this fillet the hair is brushed straight and evenly back over the head, with the exception of four long and massive locks, falling over each shoulder and each breast, which have been broken off. Over each breast there still remains a long ribbon-like ridge, which was probably left by the artist to guide him in putting on the locks, which with the ears were added afterwards. Along the top of each shoulder the modelling would be a sufficient guide, and here the continuation of the lock is only indicated by a strip of paler colour where the slip of lighter clay has been pressed. These falling locks, which would break off easily where they are deeply incised, were no doubt torn off for the sake of the ornaments which decorated them, of which the fastening holes are still visible at the sides of the ridges over the chest and on the shoulders. These ornaments were not improbably of spiral form, like the Homeric ἕλικες, which Studniczka[1] has shown to have been commonly worn in the archaic period. Behind the head the hair falls in a regular mass divided by five crosslines to a distance of ·12 mm. below the band, widening out at the base where it reaches a width of 15 centimetres. The collar-bone is indicated by lines which meet and are prolonged in a single line marking the division of the chest.

As regards the technique, the figure is certainly modelled, not cast in a mould ; the ears, the fillet, and the falling locks are added separately. The rendering of the falling locks, which are not undercut, and of the ears strongly suggests that the artist was trained in wood technique. The two principal tools used seem to have been a sharp point for the incised work and a toothed instrument for the hair. There are air holes behind each shoulder to assist the process of drying.

Some idea of the lower half of our statue may be gathered from a fragment of a small figure (Fig. 1) from the village of Piskokephalo, not far from

---

[1] See his article, 'Krobylos und Tettiges,' *Jahrbuch*, vol. xi. (1896), pp. 218 ff.

Praesos. This figure wears an apron, which the artist perhaps copied from an imported Egyptian figure, many of which wear a similar garment. The modelling of the knees and shins resembles the bony rendering of the chin of the larger figure.

The wearing of ear-rings by a male figure is remarkable and never found in Greek art, though Pliny (*N.H.* xi. 136) states that both sexes wore them in the East. Servius (in Virg. *Aen.* i, 30) mentions as remarkable that Achilles in a statue of him at Sigeum in female attire was represented as wearing ear-rings. Again, the mode of dressing the hair cannot be exactly paralleled in early Greek Art. A somewhat similar arrangement is found in the Cleobis and Biton[1] figures at Delphi: but here the hair falls behind the head in separate tresses and not in one mass, while the locks in front are three in number and fall straight down over the breast, and are moreover far shorter.

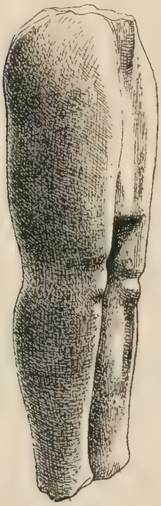


FIG. 1.—FRAGMENT OF A TERRA-COTTA MALE FIGURE FROM PISKOKEPHALO.
1 : 2 Height ·13 m.

That the figure represents a god seems to follow from the fact that a diadem is worn: the elaborate arrangement of the hair precludes it from being an athlete.

The importance of this figure lies in the fact that we possess little monumental evidence of Archaic sculpture in Crete. There is literary evidence of an early Cretan school of sculpture which influenced the art of Greece Proper. We learn from Pausanias (ix. 40, 3) that two wooden images, ascribed like so many primitive *ξόανα* to Daedalus, were shown in his day in Crete, one of Athena at Cnossos and another of Britomartis at Olous, only a day's journey from the Eteocretan territory: in another passage (viii. 53, 7) he says that 'the residence of Daedalus at the court of Minos made the Cretans long famous for the making of wooden images.' Cretan art in the early Archaic period is connected closely with the so-called 'Daedalid' school at Argos and Sicyon, of which the earliest historic members were Endoeus, who is said to have visited Crete, and the Cretans Dipoenus and Scyllis. In their school chryselephantine technique was evolved from primitive work in wood,[1] the ivory for which was possibly obtained through Crete, which from the earliest times was in trade communication with Africa; while of their work in stone we can form some idea not only from the well-known figure from Eleutherna, but also, according to a very probable conjecture, from the figures of 'Cleobis and Biton' at Delphi by the Argive Polymedes[2] and a seated figure from Tegea.

---

[1] *Bulletin de Correspondance Hellénique*, vol. 24 (1900), pp. 445-462 (Plates XVIII.-XXI.)

At Praesos we may well believe that when art could no longer find its full expression in wood, the local clay, as the material nearest to hand, was adopted in its place, just as clay also was used in south Italy and alabaster at Naucratis. Praesos possessed no marble, and never, as far as we know, imported any. Perhaps, as has been suggested above, the artist who modelled the 'Young God' has not been able quite to free himself from the traditions of wood technique in rendering the ears and falling locks. Again there is a connection with chryselephantine technique in the continuation of the falling locks in metal.

It is more than possible that future excavations on historical sites in Crete may prove that the practice of making large figures in terra-cotta, which has been first revealed at Praesos, was common in other parts of the island.

In the present lack of data about Cretan art, it is difficult to date the Young God; but judging by analogies on the mainland and allowing for backwardness[3] in this far off corner of Crete, the Young God may be conjecturally placed in the first half of the fifth century. Of other human figures from the Altar Hill, we have a fragmentary male figure, probably about 28 centimetres in height, of which the face is missing. The hair falls like a solid wig over the shoulders; the hands rest on the hips: the body shows little modelling, but the legs are well formed.

In another small, cylindrical figure (Fig. 2), the modelling is rough: the head is thrown back and the chin projects like that of the Young God. The spiral drapery is hard to explain, as is the cylindrical object held in the left hand: the right hand is perforated and must have held some offering. The figure may perhaps be explained as a priest engaged in some act of ritual.

A slightly smaller, female figure (Fig. 3), wears a high headdress with a band decorated with seven pendants. The profile is bird-like, and the modelling shallow. The body is again cylindrical, and the hands which no doubt carried offerings, are held palms upward at the waist.

---

[1] Overbeck, *Schriftquellen*, 328–338.

[2] *B.C.H. loc. cit.*

[3] This may be illustrated from the fact that Praesos issued no coins till about 400 B.C.

Of the series of Lions discovered on the Altar-hill the earliest seems to be that illustrated in Fig. 4, which measures ·26 mm. from the top of the head to the point where the neck is broken off. The small fragment of the back which remains shows that the lion stood looking three-quarter face to the front. The forms of the head are far removed from nature: the ears are set low down at the sides of the head, and the muzzle ends in a broad flat surface. The animal is represented in the act of growling, so that the skin round the mouth is drawn back and shows the teeth. Of these the canine teeth are correctly rendered, the upper behind the lower: but the molars are conventionally represented one in each jaw, the upper in front of the lower, whereas in nature they are at the back of the mouth, with a row of small and almost invisible teeth along each side of the jaw. The tongue hangs out of the mouth. The upper edge of the mane is rendered by a ridge across the head, decorated with a conventional chevron-like pattern in black paint. The eyes and the marks on the face are represented by ridges covered with paint, which was also used apparently over the whole body. This use of black paint is remarkable and without parallel at Praesos: it is most akin to the technique of a class of far earlier Mycenaean painted animals such as those from the cave of Hermes

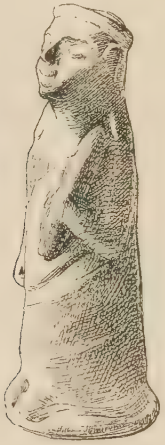


FIG. 2.—TERRA-COTTA FIGURE FROM PRAESOS. 1 : 4 (Height 24 m.)

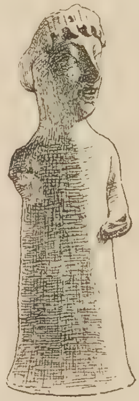


FIG. 3.—TERRA-COTTA FIGURE FROM PRAESOS. 1 : 4 (Height ·205 m.)

Cranaeus. The date of the painted lion must be at least as early as the sixth century B.C.

More striking is the lion whose head is illustrated (Plate XIII. Fig. 2). Other fragments enable his position to be restored (Plate XIV.). He was couchant with his paws stretched in front, and his tail curls over the left side of his back. The front of the body is covered with leaf-like incised work, forming a strong contrast to the smooth skin on the face, from which it is divided by a fringe of stiff hair. The eyes are deep-set and close together: the whiskers are represented by a regular ribbed pattern, the teeth and the skin at the corners of the mouth are conventionally rendered. The tongue hangs out, as in the earlier figure, and the mouth is slightly open to give an expression of ferocity. The restored figure measures

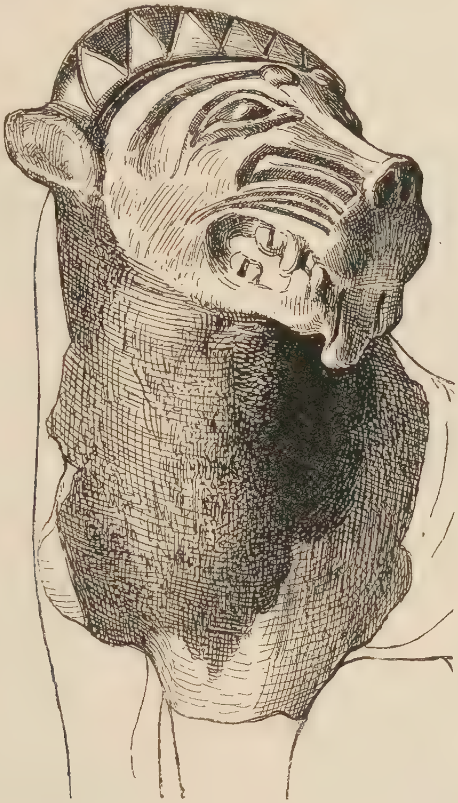


FIG. 4.—PAINTED TERRA-COTTA LION FROM PRAESOS.

·34 m. from the ground to the top of the head. In spite of conventionality the head is most striking: it shows archaism at its best. The artist has known what details to omit and what to emphasise, with the result that he has avoided a merely naturalistic treatment and produced a work of spirit and originality. It is of the same material as the Young God and probably a little later in date.

Another terra-cotta lion of at least life size was discovered on the Altar Hill, unfortunately in a very fragmentary condition. The head, however, has been restored, and its dimensions, 40 centimetres in height and 42 in width, give some idea of the great size of the whole figure. It was fastened to a pedestal by pegs driven through holes in the front paws. The modelling is careless and shallow, and the artist must have relied rather on the size than the quality of his work to produce an impression. The figure may date as late as the end of the fourth century.

Lastly, fragments of terra-cotta lion-masks were discovered ·28 m. in height and ·30 m. in width, which probably served as gargoyles or water-spouts for a wooden building on the Altar-Hill. They are each made in two halves and therefore cast in a mould. They are in no sense works of art and only meant to serve an architectural purpose.

The last class of terra-cottas from this site consists of a number of fragments of oxen. Two heads are intact, one of which with the neck which is very massive and ·16 m. in depth, measures ·16 m. Between the horns is a rosette, and deeply incised lines have been worked with a sharp instrument round the eyes and nose. One complete bull, very roughly modelled, on a much smaller scale, measures 11 centimetres in height and 21 in length; similar figures have been discovered in several sites in Crete, notably at Goulas.

## § 3.—THE SHRINE AT Μεσαβρύσις.

On this site, where there are the foundations of a small temple, possibly dedicated to the deity of the stream, was found an interesting series of *ξόανον*-like female figures. The majority of these are too fragmentary to be restored: but the upper half of two figures, the smaller of which is illustrated here (Fig. 5), and the lower halves of two others (Figs. 6 and 7), give some idea of their general character. The body is cylindrical and made in two halves, turned on a potter's wheel and united at the waist while the clay was still wet. The feet are close together and project but little from the body: the drapery is represented by incised lines. One, or in some cases both hands are held below the breast and carried offerings; one fragment shows a hand holding a pomegranate. The figure here shown (Fig. 5) measures ·44 m. in height, and with the lower half of the body probably measured 2½ to 3 feet. The hair is treated in separate tresses which fall over the back and shoulders. The wearing of jewellery is characteristic—necklaces with pendants, bracelets

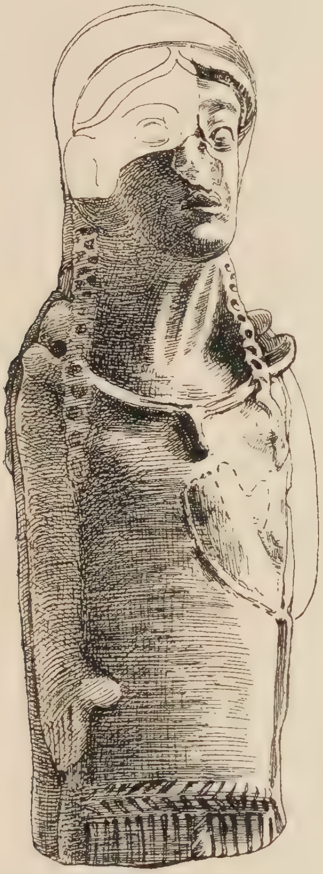


FIG. 5.—UPPER PART OF FEMALE FIGURE FROM PRAESOS. (1 : 4.)

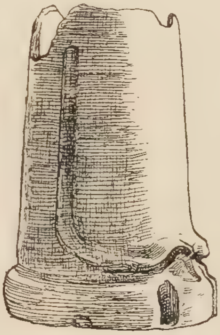


FIG. 6.—BASE OF A TERRA-COTTA FEMALE FIGURE FROM PRAESOS. (1 : 8.)

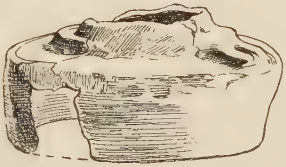


FIG. 7.—BASE OF A TERRA-COTTA FEMALE FIGURE FROM PRAESOS. (1 : 8.)

and earrings, in one case ·04 m. in diameter with a pattern resembling a flower with eight petals.

The modelling of the body makes little attempt to imitate nature, that of the face shows knowledge of the forms but is shallow and careless. The figures make no claim to be regarded as works of art, but they are interesting as showing the ordinary work of the local school. They find their closest parallel in the series of female votive figures from Larnaka in Cyprus.[1]

## § 4.—THE FOUNTAIN AT VAVÉLLOI AND THE TRIAL PIT ON ACROPOLIS I.

These two sites can be classed together since the finds are almost identical, consisting of the same types of plaques in both cases and a few fragments in the round.

The immense richness of the site at Vavélloi may be inferred from the large number of plaques in the Museum at Candia, which must represent but a small fraction of the many hundreds which have been dug up by the peasants and mostly perished, or still remain to be unearthed.

Of these plaques Professor Halbherr[2] figures seventeen varieties, of all of which, except three, specimens were unearthed in 1900, when rather over thirty varieties were discovered. The plaques vary in size from about ·05 to ·2 m. in height. One of the most primitive representations, which occurs in several different types, is that of a nude 'Oriental Goddess,'[3] which is well distributed over the east part of Crete.

The most common type of all represents a draped male figure,[4] perhaps a priest, with long hair, carrying an offering; of this there are at least fifty specimens at Candia, two of which were found by Mr. Hogarth near Epano-Zakro. Two types represent warriors armed with spears and shields, one of which is decorated with a ram's head[5]; like the Mycenaean male figures they wear tight girdles, which contract the waist. Two other types show a female figure seated between two columns with a triglyph above; her mourning posture suggests Demeter bewailing the loss of Persephone.

---

[1] See Mr. J. L. Myres in *J.H.S.* 1897, p. 166 ff.

[2] *American Journal of Archaeology*, loc. cit.

[3] Halbherr, *A.J.A.* vol. v. Pl. X.

[4] *Ibid.* Pl. XII. No. 1.

[5] *Ibid.* Pl. XII. No. 3, and p. 390, Fig. 19 (the whole of this figure can be restored from the finds of 1900).

Three different types represent a nude boyish figure,[1] the position of whose feet recalls the scheme of Polyclitus: they are of late, possibly Hellenistic date, and may represent the dedications of Ephebes. The most charming figure of all is that of a dancing maiden in a high head-dress and short chiton [2]; the background of bullrushes recalls the Hellenistic reliefs. Certainly of Hellenistic date are two large plaques, one of which represents a draped *κόρη* suggesting a Tanagra type, the other Aphrodite half draped, with Eros at her feet. One type representing a kneeling archer,[3] can be roughly dated to the end of the fifth century B.C., since the same representation with very similar treatment is found on the earliest coins of Praesos about 400 B.C.

It will thus be seen that the series covers a large space of time, some being quite archaic and others Hellenistic. The fact that some of the most primitive are also the most numerous seems to imply that they persisted by the side of more modern productions. They are mostly in a broken condition, and perhaps the deposit was formed of offerings, which, being of no value, were broken and buried as they became too numerous. One remarkable feature of the series, as of terra-cottas from Praesos generally, is the absence of paint such as is commonly found on the terra-cottas of the Greek mainland and Asia Minor.

Of terra-cottas in the round no whole specimens were discovered on the Vavélloi site. The fragments include a few pieces of drapery of late style and a number of heads, also mostly late, the most interesting of which represents a bearded satyr. But figures in the round seem not to have been popular at Praesos, though evidently manufactured on the spot, as is shown by the discovery of a fragment of a mould.

In conclusion, I wish to thank Mr. Bosanquet, not only for allowing me to publish his finds, but also for advice and help, and Dr. Joseph Hazzidakes, the Ephor-general of Antiquities in Crete, for affording me every facility in the Museum at Candia.

E. S. FORSTER.

---

[1] *Ibid.* p. 392, Fig. 24.

[2] *Ibid.* Pl. XII. No. 5.

[3] *Ibid.* p. 392, Fig. 25.

# EXCAVATIONS AT PETRAS.

ON a low spur of the hills that shut in the Sitia valley on the east, immediately overlooking the sea and separated from the port of Sitia by nearly a mile of sand-bar, stands the unimportant hamlet of Petras, originally Venetian, afterwards 'Turkish' or Moslem-Cretan, and for the most part ruined and deserted since 1896. Mr. Marshall came here in January, 1901, and collected sherds which left no doubt about the early date of the remains, treated by previous travellers as Hellenic. Lying on a deep bay and commanding as it does the easiest route into the Eteocretan highlands, it seemed likely that Petras might furnish useful clues, if not to the indigenous culture of the district, at any rate to the foreign influences that were at work here during the Bronze Age. Later, when two months of work at Praesos had produced very little Kamáres pottery of the familiar mid-Cretan types and no Mycenaean, it seemed doubly desirable to examine this, the nearest definitely Mycenaean site, and to ascertain what had been the local varieties of early pottery. Accordingly I made trials at Petras on June 17th and 18th, 1901, employing ten men the first day and sixteen the second.

With the exception of the ground occupied by cottages at the northern tip of the spur, the whole hill is cultivated. It was covered with wild undergrowth until fifteen years ago, when two Moslem brothers bought and reclaimed it, setting a large force of labourers to demolish the ancient masonry and to form the hill-sides into cultivation-terraces. The field-walls contain many roughly-dressed 'megalithic' blocks of limestone, and a certain amount of ashlar, making it evident that there were extensive buildings here. My informants said that the destruction had been systematic and complete, and trial-pits in the fields showed them to be right. In such a case the best chance is to try the roads. Cuttings into the roadway skirting the west side of the village (B. on Fig. 1) revealed a well-built wall 17 m. long and 1·50 m. high running north and south; a return-wall projected at either end, and two others between them divided the long front into three nearly equal compartments. We had the complete length of the building, but could not ascertain its width, all the cross-walls being broken off where they emerged from the protection afforded by the terrace carrying the road. The wall at the north was 1·40 m. thick, that at the south 1·10, the two partition-walls ·80 m. The building was

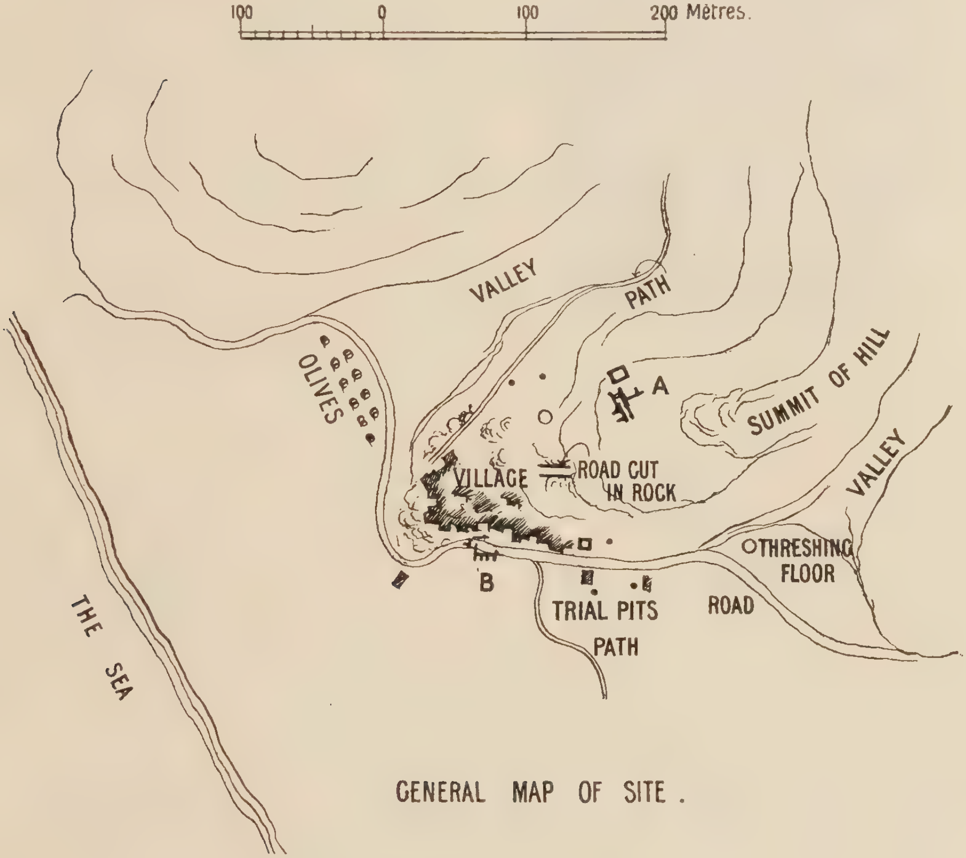


FIG. 1.—PETRAS NEAR SITIA.

(N.B.—The sea is to the North of the village.)

dated by two large *pithoi* in the middle compartment and by the two vases shown in Figures 2 and 3, which lay close by at a higher level, as if fallen from an upper storey. The one is a wide-mouthed jar, ·26 m. high, covered with a coarse Kamáres slip varying from red to black, on which are painted bands and zig-zags in white; it has two handles and midway between them on each side a little button-like protuberance decorated with a white cross. The other is a small spherical vase covered with a plain brown slip; it has a flat top suggestive of a closed mouth, and over it a low cross-handle. If we could trace the evolution of the *pseudamphora* we should doubtless find vases of this form (with the mouth open) among its ancestors.[1] The present specimen, however, belongs to a stage of Mycenaean art at which the *pseudamphora* was already well established.

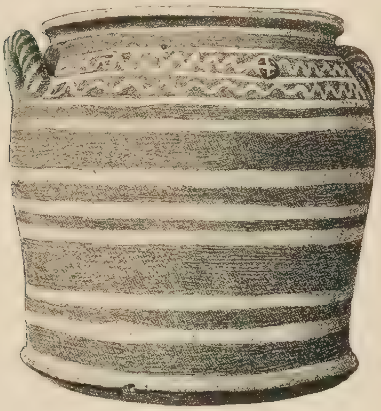


FIG. 2.—'KAMÁRES' JAR FROM PETRAS (1/5).

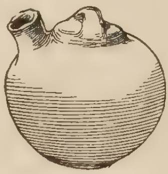


FIG. 3.—SPHERICAL VASE FROM PETRAS (1/4).

At the time of the excavation there was a tendency to treat all 'Kamáres' ware as anterior to Mycenaean; later discoveries have shown that the native technique of white decoration on dark slip was still to a certain extent in vogue along with the Mycenaean method, when the blow fell which caused the ruin and desertion of these settlements on the coast. Vases shaped like those in Figures 2 and 3 were found in House B. at Palaikastro; the Mycenaean village at Petras belonged to the same age, and we can hardly doubt that it met the same fate, as Zakro, Palaikastro, and Gournia.

---

[1] Most of the spherical *askoi* of this type are small vases. For larger ones the division of the handle by an elevated false neck served to give the handles a stronger hold on the vase, which would be heavy when filled. The *pseudamphorae* found in the Cretan coast-settlements are for the most part large and coarse storage-vessels; the small examples of fine ware become common in the succeeding period. Both forms, *pseudamphora* and *askos*, are simply bottles in which oil and other liquid commodities could be sealed up; in many specimens the funnel-like shape of the spout would make it easy to insert a stopper and cover it with the maker's seal.

I also examined a plateau north of the actual summit of the hill (A on Fig. 1), where tradition said that a 'church' had been discovered in the work of demolition. Only the footings of walls remained, but these seemed to be those of a large mansion, dated by a few fragments of Mycenaean pottery. There was the beginning of a staircase, 1·70 m. wide with three steps *in situ*, and a finely dressed door-sill of black basalt-like stone unknown in the district, measuring 1·55 m. by ·70 by ·28. At the northern limit of this plateau there projects a tower constructed in megalithic fashion of irregular limestone blocks; its front is 11·40 m., its side 8 m., its walls 1 m. thick. There is a similar tower, projecting and standing nearly 3 m. high, below the building B. In both cases the rock within is considerably higher than without and is so denuded that excavation within the towers is useless. Between sites A and B there is a pathway mounting the hill which for a few yards is cut through the rock.

On the second day we dug into the slopes outside the ancient settlement on the North-east and came upon a large rubbish-heap containing masses of Kamáres pottery, chiefly cups in all degrees of coarseness and delicacy, a few scraps of transitional Mycenaean ware, numerous terra-cotta cubes with four parallel perforations (loom-weights), pieces of a smooth hemispherical steatite bowl, and fragments of three-legged cooking pots. Closely mixed with the heap were quantities of stone-chippings and other refuse suggestive of house-building or house repairs. A possible explanation is that the place had been sacked and then re-occupied. The inhabitants swept out and rebuilt their homes, and threw the resultant rubbish outside the town.

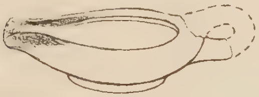


FIG. 4.—MYCENAEAN LAMP FROM PETRAS ($\frac{1}{4}$).

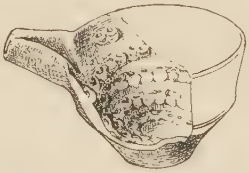


FIG. 5.—VASE WITH INTERNAL CELLS FROM PETRAS ($\frac{1}{4}$).

Among the thousands of fragments there were a few whole cups, and three lamps (Fig. 4) of a form known from several Mycenaean sites in East Crete.

The most curious vessel is the spouted cup shown in Fig. 5, which is provided internally with five rows of tiny cells; I have no idea of their use. Trial-pits elsewhere yielded an amygdaloid bead of reddish-yellow sard, obsidian flakes, a clay 'label' 9 cm. in diameter with three parallel strokes incised near the perforation at the top, a plain red sherd incised with a character like the letter N, and part of a large earthenware vase-support with triangular openings, painted in the style of the coarse pseudamphora figured on p. 313 below. The only part of the site where undisturbed deposits are likely to exist is the ground East of the building B, at present covered by the village; but the results would hardly justify the expense involved in the removal of the houses.

R. C. BOSANQUET.

# EXCAVATIONS AT PALAIKASTRO. I.

(PLATES VIII. 2, XV.–XX.)

## § 1.—THE SITE.

BRIEF reports on the work done by the British School at Palaikastro in April and May 1902 have appeared in the *Journal of Hellenic Studies* (1902, p. 384) and in *Man* (1902, No. 119). In the present paper I propose to describe the discoveries made in the cemeteries and in the houses, reserving for a future occasion the discussion of certain problems on which fuller light may be thrown by the excavations of 1903, to be made with larger resources and over an extended area, thanks to a liberal grant from the Cretan Fund and to the unfailing goodwill of Prince George's Government. The past campaign was of a preliminary nature and cost less than £150, including the somewhat serious item of transport, but excluding that of drawings and photographs. That we were able to continue our exploration of Eteocretan territory in this direction is due in large measure to the courtesy of Dr. Dörpfeld, who had expressed a wish to excavate here but withdrew his claim in favour of the British School on learning that the interest of the site was mainly Mycenaean, and of Mr. Hogarth, who had realised its importance and applied for digging rights during his fruitful campaign at Zakro. To Mr. C. H. Comyn, architect of the School, who took a full share in all the work of excavation, besides preparing the plans and most of the drawings illustrating this report, I owe a debt of no ordinary gratitude.

In a direct line the site lies thirteen miles north-east of Praesos and eight north of Zakro. The intervening country is for the most part a

---

[1] The spelling Palaikastro (Παλαίκαστρο) expresses the local pronunciation and is convenient as distinguishing this site from many others called Παλαιοκάστρο.

high limestone tableland, a region of desolate *kärsten* descending on the east to the rich inland basin of Upper Zakro and on the north to the maritime plain of Palaikastro. There the central plateau ends in steep escarpments, while the high outer barrier through which the rivers of Zakro and Karoumes have cut precipitous gorges to the sea gives way first to low gravel cliffs and then to sandy beach. Such a beach, stretching in a two-mile curve interrupted only by a steep acropolis-like headland, olive-groves clothing the plain up to the foot-hills three miles away, and a broad belt of cornland between the olives and the sea, are signs which anywhere in the Levant, even without the names of Palaikastro and Kastri, would compel one to look for traces of an ancient city. A comparison of the sketch-map (PLATE XV.) and the photograph[1] (PLATE XVI.) will show how these natural features are combined in the South-east quarter of the plain, where ancient remains lie thickly clustered over a tract called Roussolakkos (roughly 500 by 300 metres, marked by hatching on the map) or scattered in ones and twos over a far larger area.[2] Geographers have suggested the

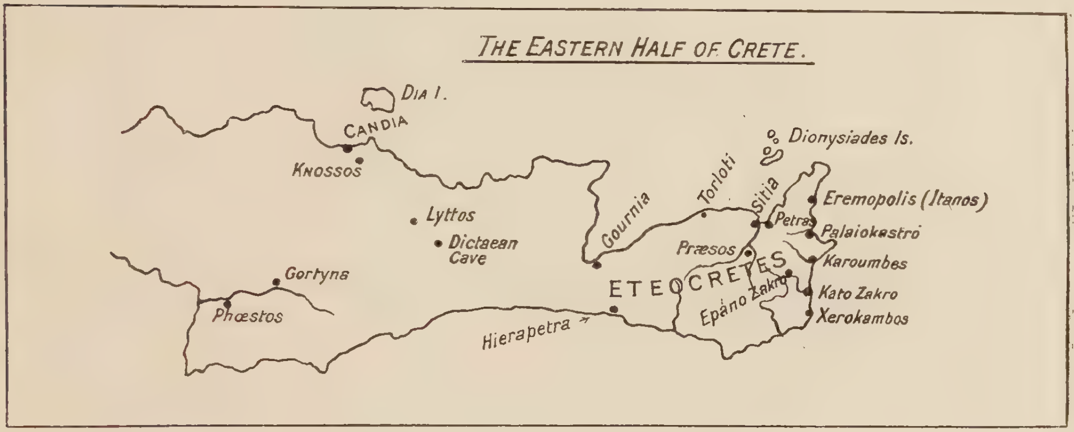


FIG. 1.—THE EASTERN HALF OF CRETE.

---

[1] Taken from a point midway between Karoumes and Πάτημα on the southern margin of Plate XV.

[2] For the geography of the Eteocretan region as a whole see Mr. Hogarth's paper on Zakro, *B.S.A.* vii. pp. 121 *sqq.*: for the physical formation of the Palaikastro plain, Spratt, *Travels and Researches*, i. 205 *sqq.*, and Raulin, *Description physique de la Crète*, Paris 1869, p. 170. The antiquities of the region were described by Professor Halbherr in four papers contributed to the *Antiquary*, 1891, pp. 201, 241, and 1892, pp. 152, 214. Here as at Praesos I had the use, thanks to Mr. Evans' kindness, of his unpublished notes of journeys in the district.

names of Itanos (really at Eremopolis five miles to the North), of Dragmos (probably in the valley of the Upper Zakro), and even of Grammion, which there is no reason to place in this district at all. These speculations are all beside the mark; the remains at Roussolakkos, which a passing traveller who noticed the ashlar blocks in the field walls might easily set down as Hellenic, are those of a Mycenaean town, and the plain has furnished only the scantiest indications of any later settlement. Few as they are, these indications are worth noting.

(1) Some terra-cotta cornices with archaic reliefs representing a chariot, now in the Candia Museum, were found twenty years ago on the east slope of Roussolakkos and might seem to indicate the position of a temple. We dug on the spot indicated by local tradition, and verified it by finding a fragment with the same cable border, but met with no remains of the building to which they belonged. A more thorough search will be made next season. The well-known arbitration-award of the Magnesians in the dispute between Itanos and Hierapetra, preserved in two inscriptions found respectively at Toplu Monastery near Itanos and at Magnesia on the Maeander, states that the Temple of Dictaean Zeus lay near the tract of disputed territory called *Heleia*.[1] The marshy character of part of the Palaikastro plain would justify the name, but the tenor of other passages in the inscription suggests that the Temple and its outbuildings covered a considerable area, and it is difficult to believe that they can have vanished so completely; for all the remains visible on that, as on other parts of the Roussolakkos site, bear the impress of the Mycenaean age. The temple is rather to be sought inland.

(2) The 'fragment of a sitting figure of colossal size and very white Parian marble,' seen by Spratt on the beach below Kastri, but broken up (as I learned locally) soon after his visit by a notorious treasure-hunting priest from Karydhi, may perhaps be associated with the remains of a similar figure on the island of Kouphonisi off the south-east coast of Crete. Kouphonisi is the *Leuke* of the Praesos-Hierapetra arbitration-award, as Palaikastro may be the *Heleia*. The inscription shows that in the first half of the second century before our era detachments from the Ptolemaic garrison at Itanos were posted at the disputed points, which have this in common (if Palaikastro be *Heleia*) that both offer safe anchorage for small craft on a coast where such shelter is rare. It was to the interest of a

---

[1] Dittenberger, *Sylloge*, 929.

maritime state like Itanos, and of her Egyptian patrons whose fleet policed these waters, to secure harbours which in the right hands would further her coasting-trade, but in the wrong hands might become the lurking-places of pirates.

(3) South of Kastri, below the modern warehouse from which the produce of the plain is shipped, are remains of a small Hellenic building, from which we obtained *imbrex*-tiles bearing the stamp ΚΝΩΣ (*ιων*)—a tile from Palaikastro bearing the name in full was already known.

With these exceptions there is no evidence that the plain was occupied in classical times. On the hill of Kastri we uncovered the remains of poor houses containing painted pottery of a later type than any found in the houses of Roussolakkos; thus the bowl represented in Fig. 2 is of a form commoner on the mainland and in the latest *stratum* at Phylakopi than in Crete, and its ornamentation is more geometric than Mycenaean. We may perhaps infer that at the close of the Minoan age, when the unwalled towns and villages on the coast were forsaken and the population withdrew to the hills, a handful of the old inhabitants lingered on the safer hill-top. However this may be, there is no reason to suppose that Kastri was ever an Hellenic acropolis. What seems clear is that Palaikastro, like many other cities on the coast, was abandoned when Crete lost her command of the sea. It may be doubted whether the neighbouring seas and islands were ever free from pirates from that day until the beginning of the nineteenth century, since when the population has been flowing back to the plain. The author of one of the MS. surveys of Crete made for the Venetian Government, writing in 1631, describes Palaikastro as uninhabited and gives the reason—it was frequented by Corsairs. Local traditions confirm this account; to this day the majority of the houses in the plain belong to migratory families whose regular domicile is in one of the mountain-villages, and the permanent inhabitants number in Cretan phrase only forty 'doors' out of 130.

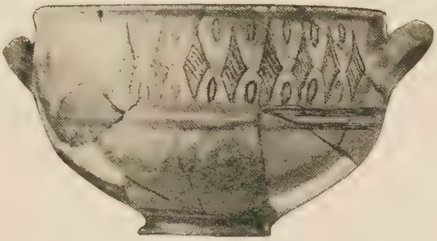


FIG. 2.—BOWL FROM KASTRI.

## § 2.—THE EARLIEST CEMETERIES.

(PLATE XVII. 1–3.)

The earliest graves were found on a gravel ridge (τοῦ Γαλέτη ἡ κεφάλα) which runs from South to North through the area of the Mycenaean town, then bends to the East to form the southern horn of the harbour. A find which is still the wonder of the province was made here some fifteen years ago by the owner of the ground; in digging the western slope of the ridge he was said to have discovered a corpse dressed in a golden corselet and with a golden sword at its side. The man himself gave a more credible version; the corselet resolved itself into gold leaf, sewn no doubt to a garment, the golden sword into one of bronze, two spans long, with four gold studs at the hilt. The gold was melted down and furnished a cross and a pair of ear-rings for his wife. This was probably a Mycenaean tomb. Excavation on the spot indicated produced a little gold-leaf but no other interment of like character; but it was time well spent, for it led us to a line of pre-Mycenaean funeral deposits on the same ridge, containing pottery akin to that of the cave-tombs at Zakro. The oldest type, represented by several incomplete examples (Fig. 3), is an oval or globular hand-made jar of grey-green clay with tubular suspension-handles and a decoration of impressed triangles, or of parallel incised lines. Then come a variety of beaked jugs, some of which bear marks of knife-trimming, and stone vessels of green schist, the finest of

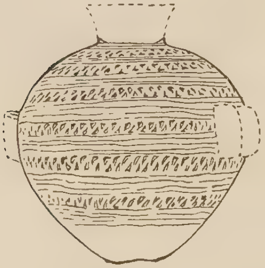


FIG. 3.—HAND-MADE VASE, WITH IMPRESSED TRIANGLES.

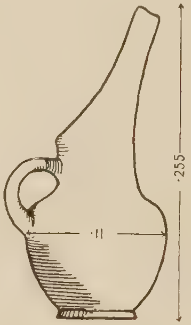


FIG. 4.—BEAKED JUG.

which, a lamp with flat spout and pierced ledge handle and decoration of parallel incisions grouped in triangles over the whole exterior, is shown in Plate XVII, Figs. 1 and 3 (top centre). A larger bowl, and a convex lid on which were carved returning spirals of the early Aegean type, were only represented by fragments. At the foot of the western slope there occurred some early wheel-made jugs, one of which (Fig. 4) unites a ring-foot with an exceptionally elongated beak. Its clay is reddish, covered with a brown slip. The other objects found here were numerous obsidian razor-blades and a miniature bronze single-axe (·05 m. long, ·03 broad). The ridge had been subdivided by low dry-stone walls, but most of them, being built without foundation on a steep slope, had slipped downwards and crushed

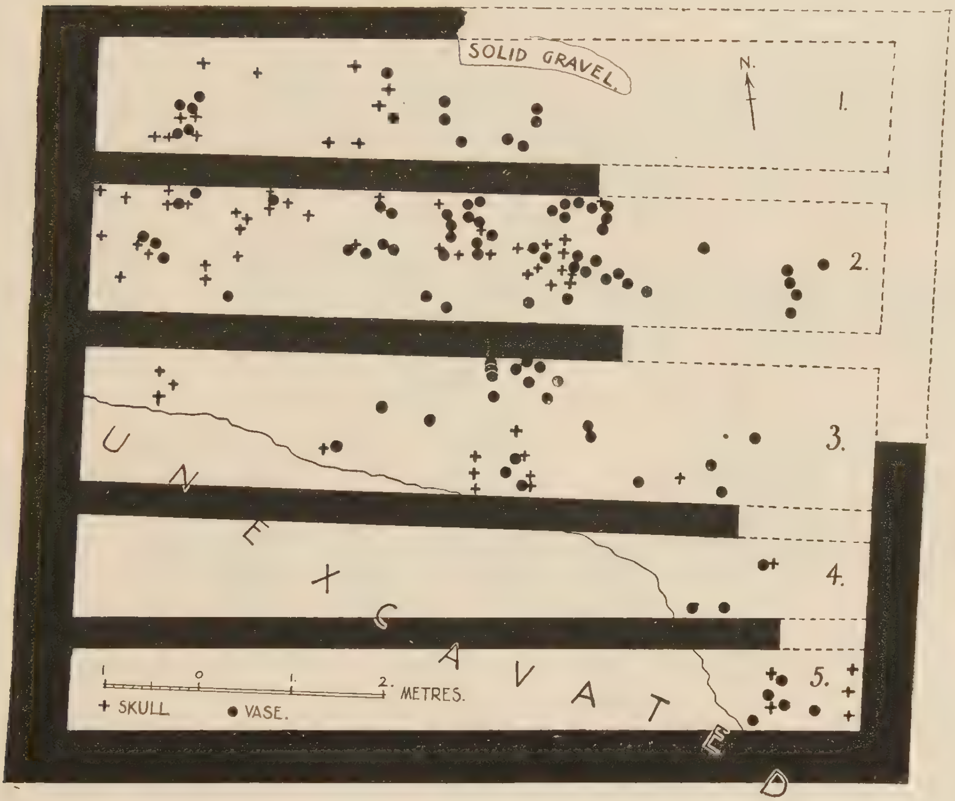


FIG. 5.—BONE-ENCLOSURE OF THE KAMÁRES PERIOD.

and confused the deposits between them. No skeleton was found extended at length and no skull fit for preservation; the bones were heaped together and much decomposed.

A better preserved cemetery, characterised by the same parallel subdivisions, was excavated on the same ridge further to the south, and here it was possible to observe, and to some extent preserve, the human remains as well as the pottery (Fig. 5). It is an oblong, nearly rectangular enclosure (9·70 m. by 8·25) built of rough limestone blocks and divided

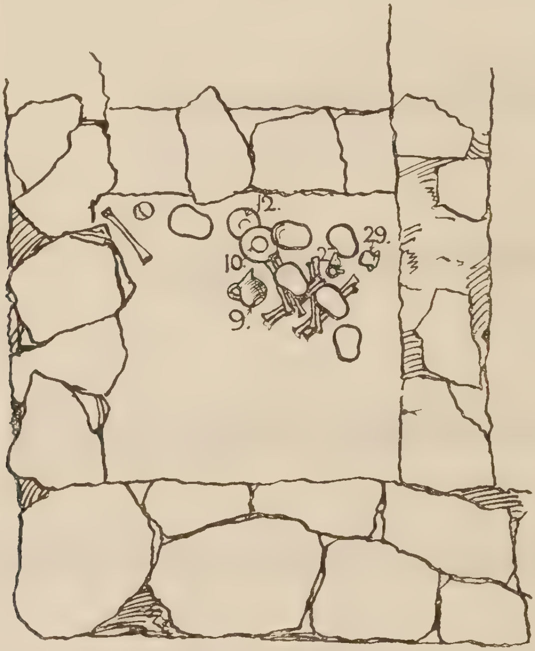


FIG. 6.—DETAIL OF KAMÁRES BONE-ENCLOSURE.

into five narrow compartments by low walls of the same material. The north-east corner is obliterated, the remainder has been but little disturbed. Fig. 6 illustrates the way in which the skulls and principal bones of bodies skeletonised by previous interment elsewhere were deposited in this final resting-place. With them were vases, over 140 in all, a selection of which are shown in Fig. 7. The lower row contains five types of jug, a miniature amphora, and a basket-like vessel with two handles on the rim ; the two upper rows represent a variety of drinking-cups. Cups were in a great majority. Small jugs were one in twenty of the whole find ; there were five little square-mouthed amphorae and as many plates (from ·11 m. to ·28 in diameter). In only one instance were bones found in a vase.[1] The vases had not contained offerings when buried here, for in many cases the cups and plates were turned bottom up and the jugs on their sides ; but it is possible that they had contained food or drink placed beside the corpse at the original interment. In several cases the handle of a cup was broken, as might easily happen if the bones and accompanying vessels were transferred together from the grave to the bone-pits.

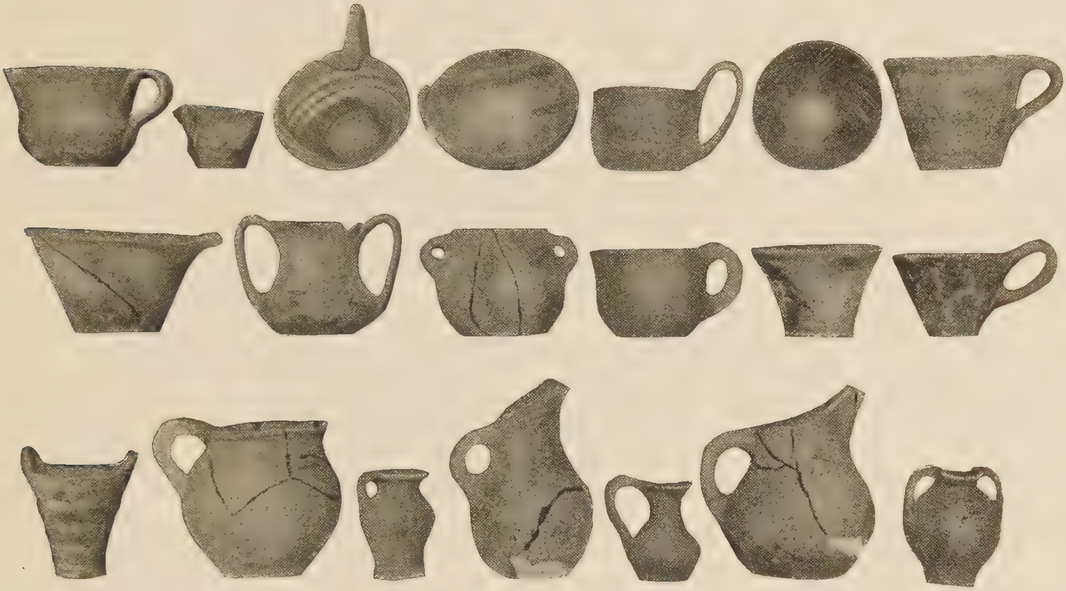


FIG. 7.—TYPES OF POTTERY FROM THE BONE-ENCLOSURE.
(Scale about 1 : 5).

In some cases skulls and vases were so tightly packed that it was impossible to decide which had been deposited together. Fig. 8 shows a group of three jugs, a small jar with contracted mouth, and a round dish, which were associated in one of the latest interments made here. The jug with long spout is of a common Kamáres form, but the trefoil mouth of the tall jugs is characteristic of the developed Mycenaean period at Palaikastro.

---

[1] No. 40. Tall jar of grey ill-fired clay, with small pouring-lip and two handles just below the rim. Ht. ·20 m. ; diam. at base, ·10 ; at mouth, ·17. Laid on its side, containing bones of an infant.

With this doubtful exception the pottery is pre-Mycenaean in character. While much of it is a cheap and commonplace local ware covered with a brown, black, or reddish wash, there are over a score of examples of true Kamáres technique, with vivid polychrome decoration of white and orange-red on a black slip.

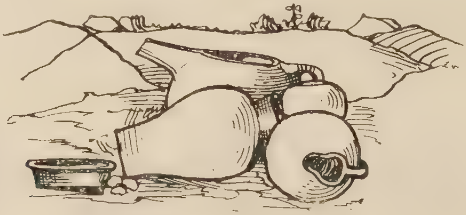


Fig. 8.—Group of Five Vases, as found.

As the examples show (Figs. 9–12), the ornament is geometrical and as yet unaffected by the distinctive naturalism of the succeeding period. The forms are relatively more advanced than the decoration; Fig. 9 and the two-handled cup in the middle of the upper row of Fig. 7 are skilful reproductions from metal prototypes. Another cup is adorned with the figure of a white dove, modelled in the round and supported on a slender stem so as to appear to hover over it; and a still more ambitious piece of plastic work, a bowl found outside this enclosure on the opposite slope of the ridge, has the whole of its interior covered with miniature oxen, reclining rank behind rank to the number of nearly 200 with the figure of a herdsman upright in the centre. The cup represented on Plate XVII, Fig. 2, belongs to a different class; I know of no close parallel for the charmingly free scroll-pattern on its exterior; the nearest analogies are to be found at Phylakopi. It is painted in dark sepia, with a white border to the sepia band, over a buff ground sprinkled with sepia spots.

The patience of the few picked "knife-men" who lay or crouched in the trenches cutting through the compost of bones and pottery inch by

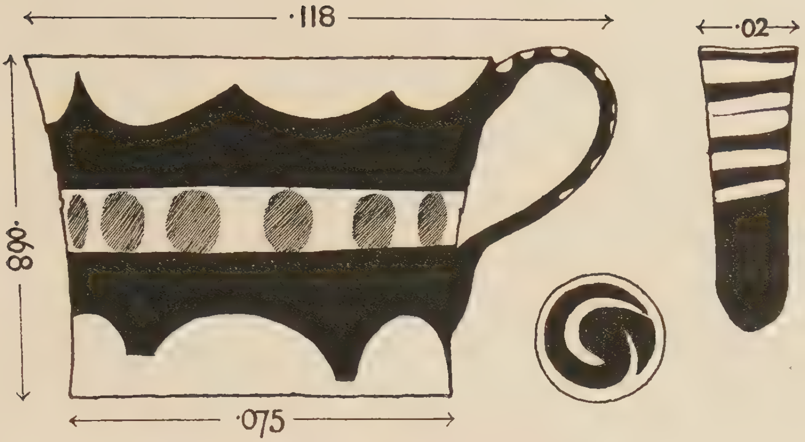


Fig. 9.

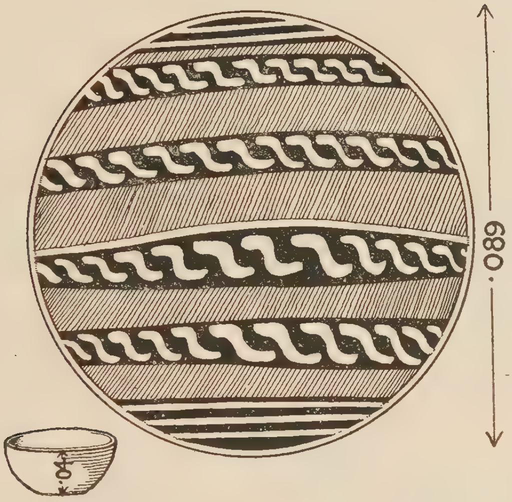


Fig. 10.

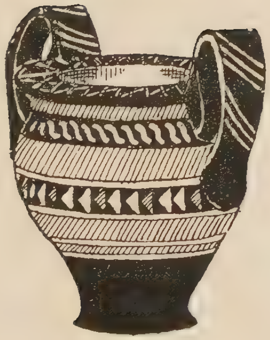


Fig. 11.

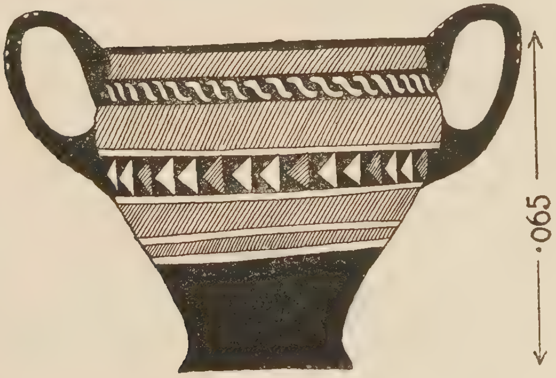


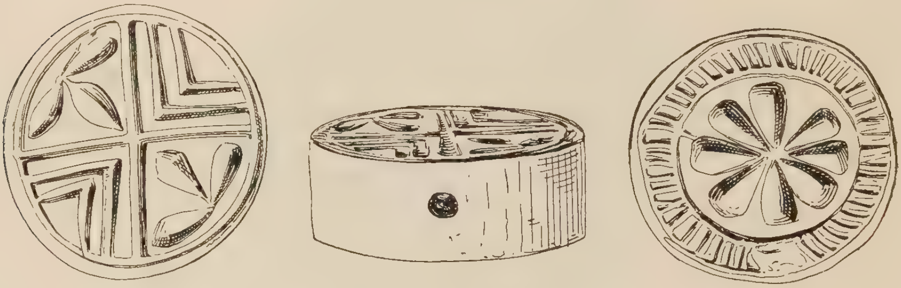
Fig. 12.

Kamáres Vases from the Bone enclosure.

(Note. -The hatched surfaces are red.)

inch was sometimes rewarded with unexpected treasures such as the exquisite little vases shown on Plate XVII, Fig. 3. Of those in the upper row the first from the left is of a soft grey and pink sandstone, the second of limestone, the third is the lamp of green schist already described, the fourth is a delicately carved crater of alabaster, the fifth of steatite. In the lower row, the first and third are flat-spouted steatite lamps,[1] the second a plain steatite bowl. These vessels seem to have been valuable; the alabaster bowl was protected by an inverted plate; and a clay lamp and several clay bowls shaped and coloured in imitation of stone vessels are a further proof of the extent to which they were prized. Later in the Mycenaean period we know that steatite vessels became relatively common.

The *Triton*-shell occurs as frequently in early deposits in Crete as it does in Mycenaean ornament—for the so-called *murex* on the later pottery is only a degradation of the *Triton*; so it was not surprising to find one here. It lay immediately under a skull together with the polychrome bowl represented in Fig. 10 above, two common cups, and a coarse tripod cooking-pot.



*a.* *b.*

FIG. 13.—IVORY DISC ($\frac{2}{1}$).

Another interesting little group consisted of a tiny bronze cutter, a common yellow cup, and an ivory disc with engravings on both faces (Fig. 13).

The quartered design of *a* is related to patterns on Kamáres vases from this district, that of *b* to some of the early steatite prism-seals published by Mr. Evans in 'Further Discoveries of Cretan and Aegean Script'

---

[1] One of them was found outside the S.E. angle of the enclosure, near a skeleton stretched at full length, the only instance of normal inhumation found in this excavation.

(*J.H.S.* xvii. 1897), in particular to Pl. x. 13 *b*, while the border may be compared with that of Pl. ix. 1 *c*.

From another part of the enclosure came a black steatite prism-seal of the transitional class which Mr. Evans has described as in many respects fitting on to those just described (*l.c.* p. 334). The scrolls on our Fig. 14 *c* may be compared with those on a similar steatite seal in the Copenhagen collection (*l.c.* p. 335, Fig. 4); they are clearly of Egyptian origin.

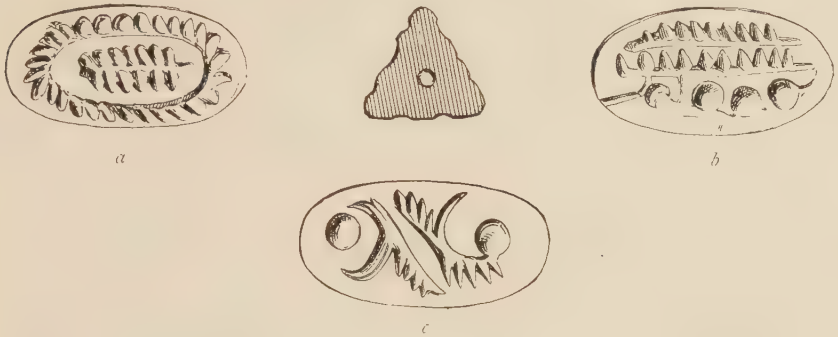


FIG. 14.—BLACK STEATITE PRISM ($\frac{2}{1}$).

## § 3.—THE PAINTED LARNAX, AND SOME OTHER LARNAX-BURIALS.

(PLATES XVIII. AND XIX.)

THE custom, wide-spread in Minoan Crete,[1] of depositing the remains of the dead in an earthenware sarcophagus, has been illustrated by several discoveries at Palaikastro. In the summer of 1901, during one of the exploring journeys undertaken by Mr. J. H. Marshall from our head quarters at Praesos, he was so lucky as to unearth two of these ossuaries in the north bank of the river. One of them, which is decorated with a painted design of exceptional interest, is reproduced on Plates XVIII and XIX from designs by Mr. Gilliéron.

Its material is a well-baked dark-red clay, coarse-grained and containing particles of quartz; over this is laid a good creamy slip; the colour of the paint varies from red to black.

---

[1] See Orsi, *Urne funebri cretesi* in *Monumenti Antichi* I. (1890), and Perrot and Chipiez, *La Grèce primitive*, pp. 455, 456.

It has the form of a chest, 1·22 m. long, ·44 wide, and ·67 high; the height of the gable-shaped lid is ·31 m., giving a total height of about one metre. Like other *larnakes* of this form it is raised on four feet, and has drain-holes in the bottom for the escape of moisture. It had four vertical handles on each side (some now missing) and a horizontal one at each end; it is remarkable that the lid is entirely without handles, provision being made for lifting and replacing it by an unusual development of the ridge-pole. Most of the known examples (*e.g.* Fig. 15 below) have handles on the lid corresponding to those of the body, and it now appears that they served not only for lifting the cover but for tying it on; above each of the outermost handles on the long sides of the Palaikastro *larnax* two holes have been bored near the lower edge of the lid,[1] evidently to admit strings by which lid and body could be laced together for security in transport.[2] The ridge-pole has an irregular polygonal section, varying from hexagonal to octagonal. At first sight this prominent feature along with the general shape of the box and its cover might suggest that the

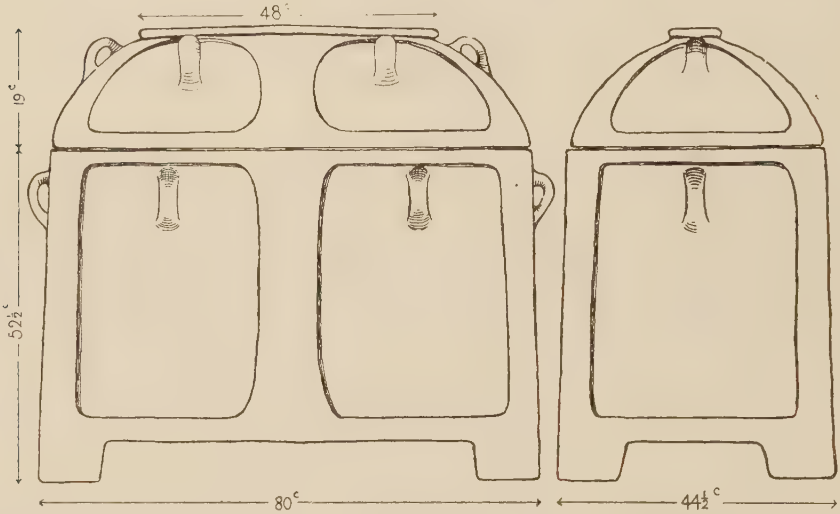


FIG. 15.—LARNAX WITH SUNK PANELS, FROM PALAIKASTRO.

---

[1] They are indicated on Plate XVIII.

[2] It has been suggested that these *larnakes* were carried by means of poles thrust through the vertical side-handles. I doubt if they would stand the strain; their attachment to the clay of the sides is quite superficial. No doubt they were usually made within easy reach of the tomb.

whole was meant to imitate a house with a gable-roof. This, however, is not the case; the construction of the body reproduces the framing and panels of a wooden chest. On the less elaborate examples previously in the Candia Museum a reminiscence of wood-construction survives only in a perpendicular line of paint corresponding to the edge of the panel; but in this example and in another which I excavated at the same spot (Fig. 15) the actual framing of the wooden chest with its six sunk panels is faithfully repeated. Mr. Evans has argued from the Nilotic decoration of certain *larnakes* that the chests which they imitated had been imported from Egypt. Their frequent occurrence in North-eastern Crete, on the highway of navigation between Knossos and Egypt, bears out this very probable supposition.[1]

The decoration emphasises the structural divisions, the frame-posts being covered by bands of spirals, serpentine lines, or dark and light triangles (on one end), with a band of quatrefoils on the raised band dividing the side-panels. These panels are ·57 m. high and ·47 wide. Each contains a single figure, the vacant spaces being filled according to a curious convention of Mycenaean design by groups of wave-lines attached to the border. Panel *a* (Plate XVIII) is a very remarkable representation of a slender column, provided with a base and moulded capital and supporting a pair of 'sacred horns' and a double-axe, springing from between two flowers. The design is a variation of the familiar and beautiful scheme of a flower on an upright stem placed between two which droop to right and left. The draughtsman has substituted a column for the stalk, and the group of horns and axe for the flower, continuing the analogy consciously or unconsciously in the axe-like form of the stamen-tips at either side. The discovery of this monument followed close on the publication of Mr. Evans' paper on *Mycenaean Tree and Pillar Cult*, and furnished a striking confirmation of his views regarding the Horns and the Double-Axe. We have other evidence of the significance of the double axe at Palaikastro. Mr. Xanthoudides recently published the designs engraved on two stone matrices which, as I learned upon the spot, were discovered at Palaikastro in a field west of Ἐπάνω Μετόχι.[2] Among the figures which it was possible to manufacture with the help of these moulds are—a woman holding a double-axe uplifted in either hand: a woman in the same attitude holding what appear to be flowers: a pair of horns: two very ornate double-axes: and an openwork disc with radiate margin recalling the stars on panels *c* and *d*, and the disc that is sometimes associated with the horn emblem.

---

[1] Many have been discovered by the peasants at Palaikastro; see Spratt, *Travels in Crete*, i. p. 210. One is built in near a well to serve as a wash-tub, another filled with soil and used as a huge flower-pot. All the crosses on the map (Plate XV), west of those at the foot of Kastri, mark spots where they have been found. Near Turloti I saw one in use as the recipient of a wine-press.

[2] Ἐφ. Ἀρχ. 1890, πιν. 3, 4.

Palaikastro has also furnished a parallel for the stepped pedestal immediately under the double-axe of the larnax, in a stepped plinth of steatite (·115 m. square at base, ·09 high) which I obtained from a peasant there and placed in the Candia Museum; in the centre of its upper surface there is a round drilled socket ·04 m. deep and nearly ·02 m. in diameter, and two holes for horizontal cross-bolts have been bored through from opposite faces of the upper step.

The remaining panels represent respectively a winged gryphon, a fish, and a bird. The upper part of *b* is divided off by a straight line supporting two horn-emblems; the adjoining border is filled with conventional 'rock-work,' the space being too small for the usual wave-lines; a star and a flower appear in the field. The drawing of the gryphon, represented standing with spread wings and uplifted tail, is far from successful. The fish (? dolphin) on *c* (Plate XIX) is represented upside down, according to our conventions; in the field are two stars and a rosette. The bird in *d* has wings and tail treated in the same fashion as the wings of the gryphon. The ornamentation of the lid repeats the star and other elements which appear on the body; that of the ends includes scale-pattern, chess-board, and a pair of horns with a bud springing from between them.

Mr. J. H. Marshall, to whose promptitude the preservation of this important monument is due, finding himself unable to undertake the publication of it owing to the pressure of his work in India, has sent me particulars of the circumstances in which he discovered it and its fellow. In the following note, A is the painted *larnax* now in the Candia Museum, B an inferior example which was much ruined and has not been put together.

'The corner of B was projecting from the bank of the river about a mile inland. It had been laid bare by the storm which swept over Eastern Crete a little time previously. At the back of this was A; both were surrounded by walls of unhewn stones roughly set together and the floor was also paved with rough stones. Behind A were two Mycenaean vases.[1] The two *larnakes* were side by side within an inch of each other. The first exposed to view (B) was made of coarse smooth clay of more tenacious texture than A; on this was a thin red slip and dark sepia paint burnt to black; it seemed to have been overfired. The lid was flat. The

[1] These will be published in an article by Mr. R. M. Dawkins on the Palaikastro pottery.

sides had no perpendicular bands, but the base and corners projected 1·8 cm. from the walls. It was much destroyed; whatever ornament there had originally been was of the plainest description Its whole appearance was of the coarsest and most indistinctive kind, but its contents seem to proclaim it as belonging with A to the Mycenaean period. There were fragments of a bronze cutter, of a dagger and spearhead. In A, there were a knife and spear-heads and remnants of a human skull, but no other bones.'

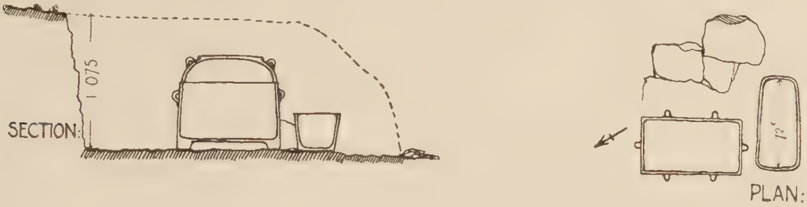


FIG. 16.—POSITION OF LARNAKES IN RIVER-BANK.

A cross on the map (Plate XV) marks the scene of Mr. Marshall's discovery, on the north bank of the river beside the hamlet of Ἁγίαν Τριάδα. It may have been a family burial-place attached to the megalithic house a hundred yards further up stream, which yielded Mycenaean pottery and a lamp like the one found at Petras (p. 285, Fig. 4). The winter floods are gradually eating away the bank, and the peasants have seen several *larnakes* exposed and broken up. Mr. Comyn and I excavated round about and discovered two others, crushed by the stream but in their original positions (Fig. 16). One is the small chest with sunk panels already

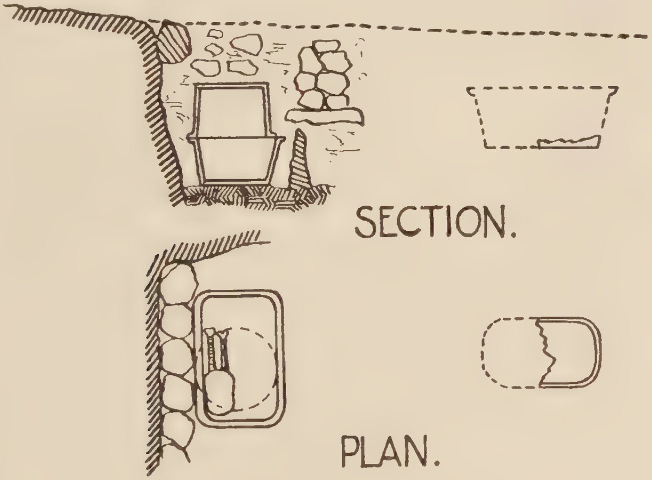


FIG. 17.—LARNAX-BURIAL ON THE CLIFF.
(Scale about 1 : 30).

mentioned (Fig. 15 above), a few vertical stripes of dark red being all that remained of the painted design. The junction of lid and body had been puddled over with fine clay so as to seal it hermetically. The bones inside were almost completely decomposed. A small *pseudamphora* with careless black paint on a red slip stood on the ground at the north end, and a broken bronze knife-blade was found to the East. South of this chest was a bath-shaped larnax ; it contained only the bones of a skeletonised corpse, the arm- and leg-bones piled in the middle, the skull laid at the narrower east end.

Another interment of this kind was discovered on the cliff south-east of House *A*. My attention was called to it by some pieces of limestone set in line along what looked like a cut edge of the soft conglomerate which forms the cliff. The deposit, shown in Fig. 17, consisted of a small bath (·50 m. by ·25 m. internally) with a smaller tub (circular base ·32 in diameter), inverted over it to form a cover. When the cover was lifted two fragments of a skull were seen lying on a surface of fine sandy earth ; below this filling were a skull and bones, not of a child as I had expected, but of an adult ; the two fragments laid on the surface had evidently been overlooked when the bones were transferred from the grave to the ossuary. Below the skull were fragments of a bronze ring.

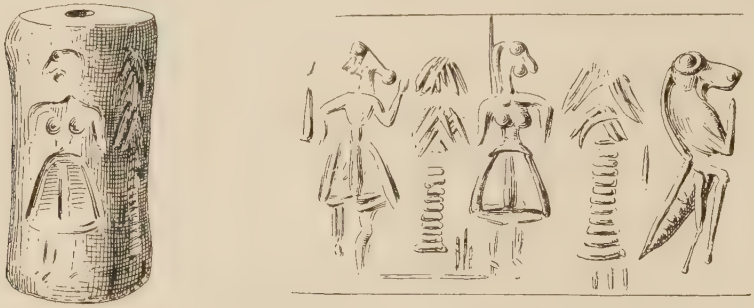


FIG. 18.—ENGRAVED CYLINDER FROM LARNAX-BURIAL.

A yard away to the west, lying on the floor of a crushed and broken bath-*larnax*, was found an engraved Mycenaean cylinder of soft black stone, the design of which is developed in Fig. 18. The stone is so much worn that it is hard to say whether the two female figures are meant for zoocephalous companions of the lion-headed demon, or ordinary women. Although the design is Mycenaean, the form is a very rare one in Crete ; its presence here must be due to Oriental influences. In like manner a cornelian bead with scarabaeoid markings found in House *B* points to the importation of Egyptian forms.

## § 4.—The Beehive Tomb.

About 300 yards east of Angathia, where the road to Roussolakkos runs for some distance in the track of a small torrent-bed, the winter's floods had eaten into the roadway and exposed a 'bath-tub' *larnax.* This had been broken up before our arrival. It seemed worth while to dig round about, the more so as house-walls are visible a few paces away, and earthenware coffins are sometimes found in groups near the homesteads. This led to the discovery, on May 7th, not of another larnax, but of a chamber-tomb of a type previously unknown to the native diggers. Twenty yards west of the original clue, and just north of the road, a trial pit struck the clean-cut wall of a *dromos* 7·50 m. long descending at a steep angle to the south and widening from 1·15 m. at the start to 1·45 at the lower end, where the entrance to the chamber was blocked by a wall of undressed limestone standing six courses high. Beyond was a doorway ·80 wide, cut in the dark red clay subsoil, its lintel and the upper part of its jambs destroyed. The dimensions of the *dromos* had prepared us to find the chamber a large one, but it proved disproportionately small, and irregular in shape, its longest diameter being only 2·30 m. The roof had fallen in, but otherwise the tomb had not been disturbed or plundered. We were removing the loose top-soil and had not yet reached the fallen masses of roof-earth, when there came into view a broken pseudamphora (Fig. 19) of an unusual squat shape ·065 high, ·15 in diameter, with a Triton-shell painted on the shoulder (red paint on fine yellow slip). It rested on a heap of bones, a little to the left of the centre of the tomb as seen from the door, ·70 below the surface of the ground. The skull lay ·30

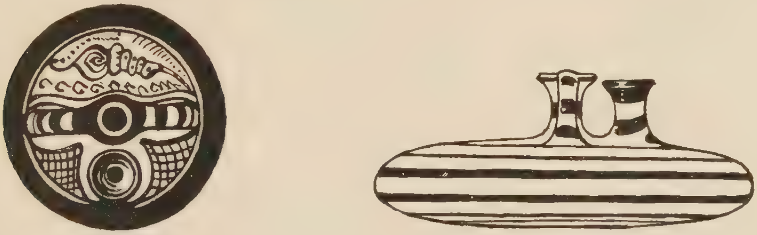


Fig. 19.—Pseudamphora from Upper Deposit in Bee-Hive Tomb. (1 : 3).

beyond the heap of bones, with the neck-opening upwards. Owing to the flow of water overhead the earth was very damp, and the skull and bones too rotten for preservation. Near the skull was a much corroded silver ring, beside the bones part of a bone pin. The grouping of the bones suggested that the corpse had been skeletonised by previous interment. The skull may have been placed on the bone-heap, as was often done in the 'Kamáres' cemetery, and have rolled away during the filling in of the tomb.

Below the bones was a stratum over a metre thick of clay in large clods—the fallen roof, and below that a number of crushed vases and implements, arranged as shown in the plan (Fig. 20).

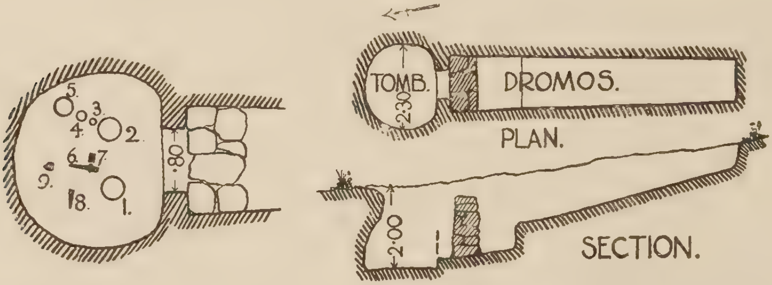


Fig. 20.—Beehive-Tomb: Plan, Section, and Detail-Plan showing arrangement of Lower Deposit.

1. Pseudamphora. Ht. ·31. Black bands, yellow slip, red clay. On shoulder chevrons in fan-grouping.

2. Pseudamphora. Ht. ·33. Clay like that of 1, with redder slip and better glaze, band of snake ornament, three bands of red-brown paint above and below. On shoulder two very conventional birds, bodies filled with chevrons, face to face, holding worms in their beaks.

3. Small cup, unbroken.

4. Bowl with contracted foot and pouring-lip. Ht. ·08. Diam. at mouth ·15, at base ·045 Careless brown-red paint round lip within and without, descending in scollops.

5. Pseudamphora. Ht. ·35. Black bands, yellow slip, yellow clay, surface perished. (Form nearly = F. and L. *Myk. Vasen.* xiv. 88).

6. Dagger. Length ·33. Three studs and traces of bone plates in sunk places of hilt.

7. Razor. Length ·13, breadth ·05, thickness of back ·009. Much perished and incapable of preservation (cf. F. and L. Taf. D. 8).

8. Knife-blade. Length ·22. Two studs for handle.

9. Fragments of thin bone with engraved lines. Perhaps a comb.

The whole of the earth was sifted, but excepting the comb just mentioned, not a particle of bone was discovered below the stratum of clods. It follows that the funeral offerings had been deposited, but not the body, when the roof collapsed, and it may be assumed that the bones laid on top of the fallen mass are those of the person for whom the tomb was prepared. In any case a comparison of the vase found above with those found below shows that the interval cannot have been a long one.

The attempt to introduce this foreign type of tomb at Palaikastro seems to have been a failure. The designer had made the initial blunder of running his *dromos* down the side of the hill, and we may conjecture that signs of weakness in the roof prevented him from excavating a chamber proportionate in size and finish to the broad and symmetrical entrance. No doubt it was failures like this which led to the substitution of stone-lined *tholoi* for chambers scooped out of the subsoil. At Palaikastro we know only of this one experiment ; the other Mycenaean graves there are ordinary pit-graves containing *larnakes.* The evidence suggests that tholos-burial was introduced in eastern Crete towards the close of the Minoan Age, and that even when they adopted the foreign form of tomb the Eteocretans retained their primitive practice of skeletonising the body and reinterring the bones.

As to the date of the tomb, the degenerate decoration of the pottery shows it to belong to that later period in which the centre of gravity of the Aegean world shifted from Crete to the mainland. On the small pseudamphora the Triton-shell is seen halfway in the course of modification which transformed it into the figure called *Purpurschnecke* by Furtwängler and Loeschcke.

We may learn something too from the bronzes. The same implements, sword, knife, and razor, larger but similar in form, were found in one of the richer graves at Ialysos, Tomb IV. (F. L. *Myk. Vas.* Taf. D. Figs. 6, 8, 11, and pp. 7, 8) which has several points of contact with that of Menidi, together with two pear-shaped jars (Taf. III. Figs. 19, 20), of a form and ornament common to Ialysos and to Tell-el-Amarna. A sword and razor of the same form as those found at Ialysos occurred in one of a series of late Mycenaean chamber-tombs at Canea, and are preserved in the Museum there. The Palaikastro tomb, lying three-quarters of a mile inland, may have been constructed by settlers who occupied the plain a generation or more after the abandonment of the town on the sea-shore.

## § 5.—THE HOUSES ON THE CLIFF. HOUSE *A*.

Of all the ruins on this site the most conspicuous are those of a large house, built of huge undressed limestone blocks, on the promontory south of the crescent-shaped port. Its former extent is attested by the number of blocks strewn at the foot of the gravel-cliff, which, like all the adjoining coast-line, is being eaten away by the sea, and even now the size and strength of its walls arrest the eye and suggest that they, and not the insignificant houses on the summit of Kastri, gave to the harbour and plain the name of Palaikastro. We tested this building by excavating a single room near the apex of the promontory; it contained large storage-vessels,[1] flakes of obsidian, steatite sherds, and a scrap of wall-revetment of gypsum—the last an interesting proof of Knossian influence, for gypsum is not readily obtained at Palaikastro, the nearest deposits being near Roukaka. It will be excavated more completely in the coming season.

Remains of smaller houses can be traced along the cliff for 300 metres south of this point. One of them, House *A* (Fig. 21) was selected for excavation in the hope that it might prove to be contemporary with the Kamáres cemetery on the ridge to the West; the finding of some well-preserved Kamáres pots [2] in a room close by on the brink of the cliff gave colour to this expectation. In the event it proved to belong to the period of the exodus, with remains of an earlier house underlying it. The plan shows the want of doorways characteristic of basement-rooms in houses of the Minoan period in Crete and Melos. Built or monolithic troughs, used perhaps for bruising olives before pressing, were found at both levels; the quadrant-shaped stone platform in the Room north of *7* may be the substructure of an oil-press.

The house lies 25 paces from the cliff on a knoll sloping to N. and W. The walls have a bottom-course of undressed limestone blocks with large corner-stones, and upper courses of rubble, the construction being very poor in comparison with that of House *B*. No brick-earth was found. There had been an earlier house of different plan on the same site; the two levels are well defined in **7**, where the clay floor of the later house was ·40 m. above the paved floor of the earlier one. Parallel to the

---

[1] Jar (ht. ·34 m., mouth-diameter ·24) with two handles and spout on shoulder; tall, rather slender *pseudamphora* (ht. ·41); two *pithoi* (ht. ·75, diam. of mouth ·38).

[2] A thin tumbler, black with white bands, and a spouted 'hole-mouth' jar with a sprinkled rock-work pattern on reddish ground.

W. wall and inside it are remains of the original wall of the room and beside it a built trough ·33 square, both below the later floor; at the same level were found the

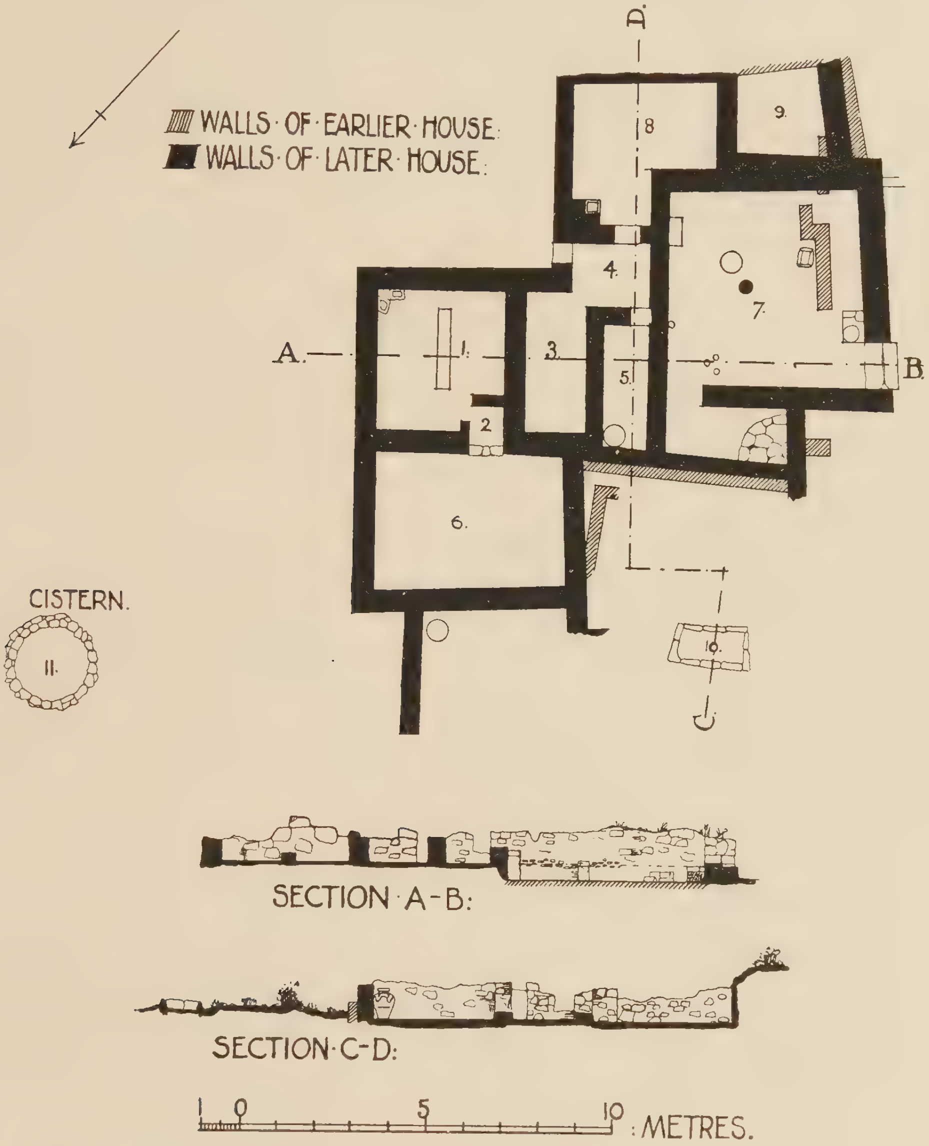


FIG. 21.—HOUSE *A*, PALAIKASTRO.

fragments of a tall jug of transitional style, decorated with red paint on a warm yellow slip, the red surfaces being stippled over with dots and other small ornaments in white. Built into walls of the later house, and therefore at least as old as the period of its construction, were pieces of a large jar painted in a local imitation of the "Palace-style" with a design of lilies and fish. Other remains of the older house may be seen outside to the W. and S.; its plan could not be recovered.

The principal room of the later house was **7**, entered by a raised threshold formed of two flags (1 m. by 1·08); its roof was supported by a column, the limestone base of which is ·32 in diameter and ·18 thick. Against the N.E. wall is a large ashlar block, perhaps used as a bench. Near the column were remains of a pithos like one found whole in **5**. The other vases found here were two jars (·34 and ·14 m. high respectively) and a small jug, of types abundant in the magazines of House *B*. In the S. angle of **7** a door leads into a side-room containing a quadrant-shaped platform, paved and furnished with a raised margin; it might be explained as a hearth, but the stones show no marks of fire, and I am inclined to regard it as part of an oil-press.

Rooms **1**, **2**, and **6** have no entrance from without. In the middle of **1** is a roughly-built bench, in the S.E. angle two stone troughs of coarse grit. Several saddle-querns and stone rubbers were found here, a perforated "fire-box" and much rustic pottery. **3**, **4**, and **6** yielded nothing of interest. **5**, a small magazine, contains a well-preserved pithos (ht. ·74, diam. over rim, ·34) with turn-over lip, ring on neck, four vertical handles on shoulder, and below them a triple undulating band in relief; broken jars of the same type were found in **7** in the courtyard. In the walls enclosing this magazine and in its floor were found the fragments of the fish-and-lily vase mentioned above.

Room **8** presents a curious structural feature in the solid block of masonry to the left of the entrance; in the angle of this we discovered a small cist, a cube of ·27 to ·30 m., neatly formed with thin slabs of slate, containing a Triton shell which had in all probability been concealed there as a charm. This room yielded a great deal of pottery; unlike the rooms of House *B*. it was in extraordinary confusion and seemed to have been ransacked at the time when the town was abandoned. Shapes 1, 2, 3, 5, 7, and 9 of Fig. 20 were represented here; there was also a black-slip jar of the Petras type (p. 284 Fig. 2), and a two-edged bronze knife-blade, with three studs in line at the butt (length ·14, greatest width ·04), and a lump of obsidian. The same confusion prevailed in the adjoining room **9**. Besides shattered pottery it yielded a bronze awl, a hone ·07 long with suspension-hole, and a miniature limestone bowl ·04 high of a type that may have been in use for a long period, since it occurred in the Kamáres cemeteries on the ridge[1] and at Patema, and with late Mycenaean ware on the summit of Kastri.

Further north the ground falls away and the walls are lost; there is a formed surface of masons' chippings, probably the floor of a courtyard, and in the middle of it an oblong trough (2·13 m. × 1·10) of slabs roughly fitted together. N.E. from the house, 8 m. away, is a circular cistern built of limestone puddled with clay, 3·70 deep, 2 m. in diameter at the mouth, somewhat less at the bottom. It contained a considerable variety of Mycenaean pottery and a sprinkling of Kamáres fragments. The rarity of the later is the more surprising because the room already mentioned in which several whole Kamáres vases were found lies only 7 m. further north.

---

[1] See Plate XVII., Fig. 3, the second from the left in the upper row.

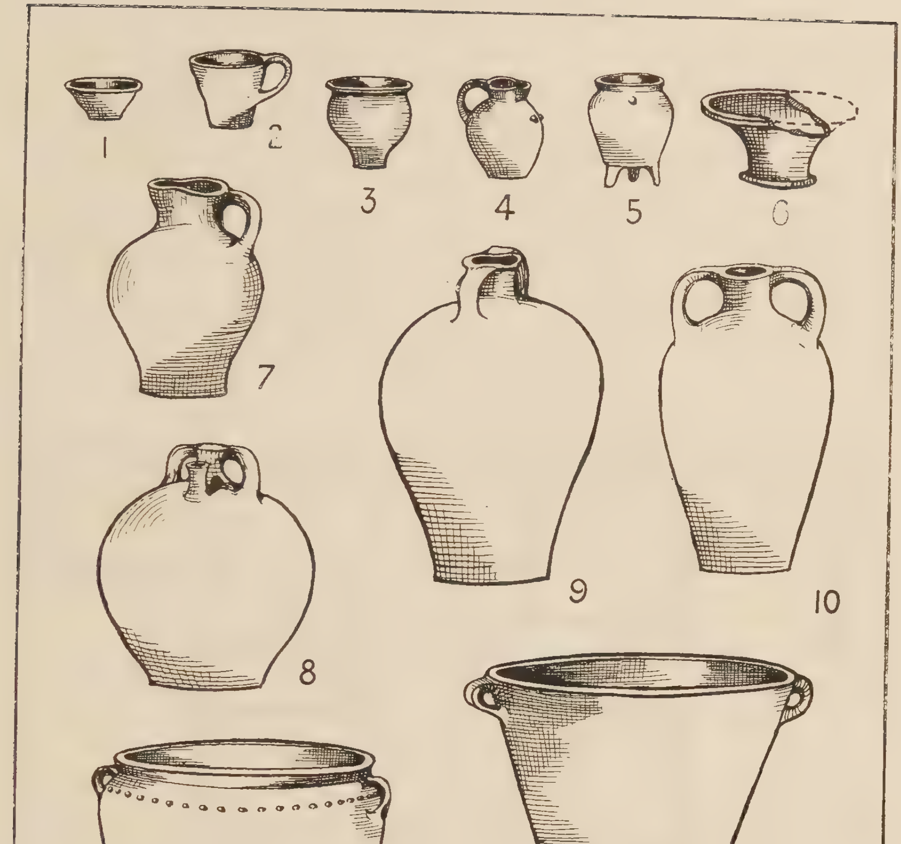


Fig. 22.—Forms of Pottery found in Houses *A* and *B*, Palaikastro.

## § 6.—THE QUARTER WEST OF THE RIDGE.—HOUSE *B*.

(PLATES VIII. 2, XVII. 4–5, AND XX.)

This block may be divided into three parts (see plan Pl. XX.), (*a*) a large house (rooms 1—22) with megalithic outer walls, shown in solid black on the large plan and separately in Fig. 21, (*b*) a courtyard to the South-east, (*c*) an annexe extending to the north and north-west (23—36) which may or may not have formed part of the same whole. So far as (*b*) and (*c*) are concerned, the present report is provisional, the excavation of them being unfinished.

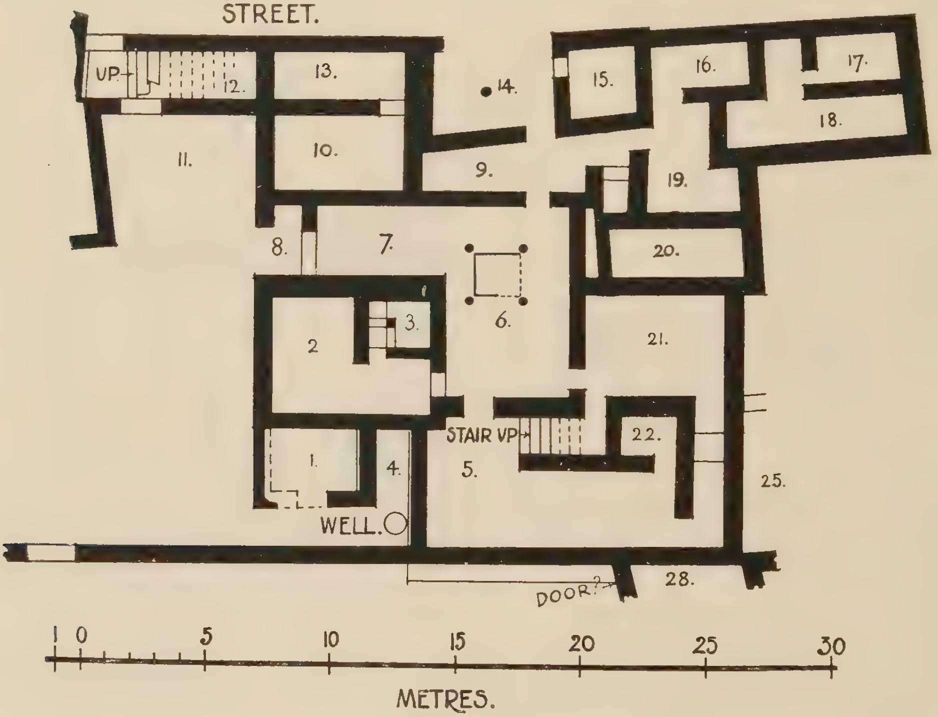


FIG. 23.—HOUSE *B*. PLAN OF THE MAIN HOUSE.

The entrance to the court was from the direction of the harbour, an earlier entrance from the street through room **12** having been blocked by a staircase inserted there when the upper storey was added. In the northern angle of the court is a well, ·80 m. in diameter at the mouth, which we explored to a depth of 4·50 m., finding both Kamáres and Mycenaean pottery. In the blind passage **4** there was a mass of fragments of the same Mycenaean types and sometimes forming part of the same vases as those found in the upper part of the well; this recess probably contained a wooden stair up which water could be carried to the bath-room **3** (see section A—B, Fig. 22).

Room **1**, opening only on the court, is destroyed to foundation-level on the east; it had a stamped clay floor, and may have been a wash-house. Passing round to the porch **8**, we find on the left a recess meant to hold a wooden bench; the porch of House *C* on the other side of the street (plan, opposite room **14**), has a stone bench in the same position, and so has that of House *G* at Zakro (*B.S.A.* vii. p. 139). A threshold (1·90 × ·55) of limestone from Cape Sidhero divides the porch from a vestibule **7** which leads into the chief room of the house, a Megaron of 7·60 m. × 5 m. (25 × 16½ ft.)—dimensions near to those of the smaller Megaron at Tiryns. Together **6** and **7** form an L-shaped whole, but the rectangle **6** is marked off by its pavement which consisted of a regular border of squared slabs, enclosing others fitted together in less regular fashion; within this again is a sunk area 1·70 m. square, framed in a border of rectangular slabs and lined with white cement, and at the four angles stand round column-bases varying from ·32 m. to ·36 in diameter. Plate VIII. Fig. 2, which is a view from the northern angle of the Megaron, looking nearly due south, makes a fuller description unnecessary. The four columns and the sunk area between them indicate the position of a square opening in the roof from which the Megaron, surrounded on all sides by other rooms, derived its light. In Mycenaean palaces on the mainland the hearth occupies the corresponding position, but we were unable to find any trace of a

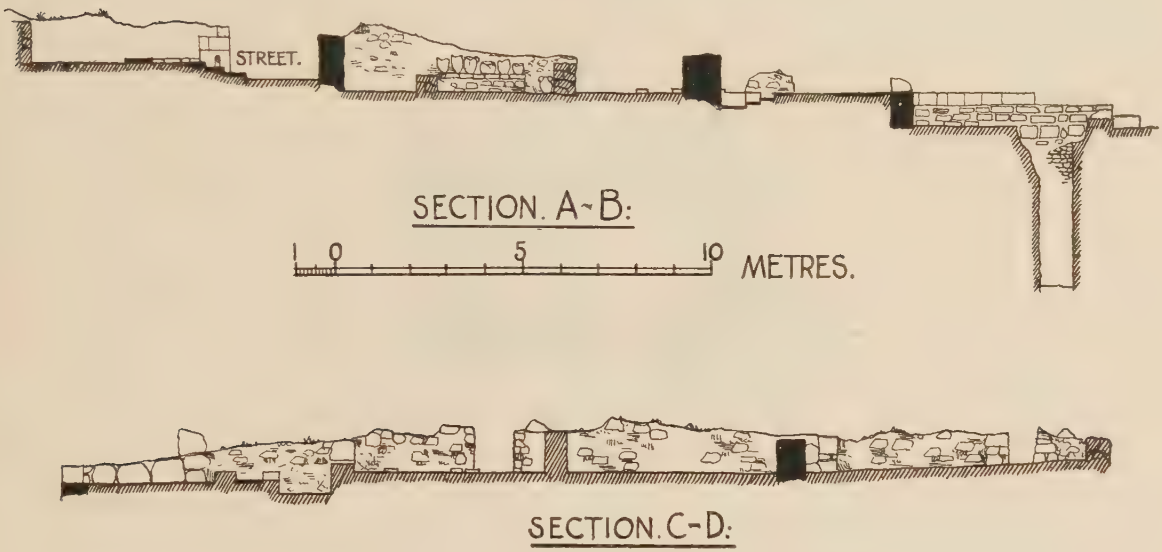


FIG. 24.—SECTIONS THROUGH HOUSE *B*.

hearth or of burned matter hereabouts and are therefore justified in interpreting this cemented space on the analogy of the cemented and sunk floors of the light-shafts at Knossos and Phaestos.

Five doorways give access from the *Megaron* to adjoining rooms—**2** is a paved vestibule from which a narrow door on the right leads to the bath-room **3**, shown in greater detail in Fig. 25. The vestibule was divided from the further part of **2** by one or more doorways; a single jamb is preserved on the left, not quite in line with the wall between **2** and **3** and thus leaving room for the step required by the difference of level between the two parts of **2**; no trace of this step remains however, the North-Eastern part of **2**, as of **1** and **6**, having been denuded by the flow of a water-course draining the upper part of Roussolakkos. Below the floor-level of **2** is a curving strip of flag-paving, apparently a footpath connected with an older house; it is not, as might be supposed, a drain.

The plan of the bath-room should be compared with that of a very similar room in the palace of Knossos (*B.S.A.* vii. p. 62, Fig. 19); such resemblances attest a more than superficial community of manners between Central and Eastern Crete as well as between the ruling class and the *bourgeoisie*.[1] The first considerable deposit of pottery was found here, consisting of the following vessels ranged in orderly fashion round the walls :

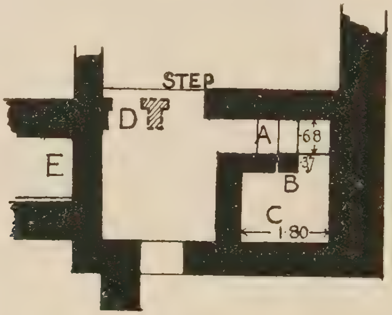


FIG. 25.—BATH-ROOM OF HOUSE *B*.

A Steps down. B Square shaft of column. C Basin. D Door-jamb. E Position of stair to well ?

(*a*) Painted ware :

Three-handled pseudamphora, with degraded festoon-pattern (Fig. 26).
Jug with slightly raised beak and careless spray-pattern.
Yellowish cup of Kamáres type with white stripes.

(*b*) Plain red ware :

Amphora with elliptical mouth (Fig. 22, No. 9), ht. ·45 m., mouth ·07 × ·11
Jug with trefoil mouth (Fig. 22, No. 7), ht. ·43, greatest diameter ·17.
Smaller jug of same shape (Fig. 22, No. 4).

---

[1] It may be suspected that a much ruined compartment in House *B* at Knossos (*B.S.A.* vi. Pl. V. facing p. 74) was a bath-room. It was not sunk, however, in this respect resembling the bath-room attached to the 'Queen's Megaron' of the adjoining Palace.

Bowl with spreading mouth (Fig. 22, No. 6), ht. ·10, diam. at mouth ·19, at base ·8.

Three-handled pear-shaped jar, ht. ·11.

Oblong cover for a dish, in the form of the head and back of an ox, ht. ·12 length ·31.

Three cylindrical jars, smaller versions of one from Petras (p. 284, Fig. 2), one containing five rounded pebbles rather bigger than a hen's egg, much blackened by fire—perhaps used for heating water.

Some miniature jugs, and common cups face downwards.

Another door leads from the Megaron into **5**, originally a very large room but diminished by the construction of a staircase on the left of the door; four steps ·70 wide remain *in situ*, and the rubble foundation of others, blocking a doorway by which **5** formerly communicated with **21**. This doorway was then turned into a cupboard and was found full of cups and rustic ware. Nearly opposite the doorway of **5** two steps descend into a stone-paved compartment; here too an enormous number of common cups were discovered. The whole area of **5** was rich in pottery, and there were burnt matter and fragments of bone in the floor earth; it may have been a kitchen. Minor finds: three female idols of clay, one with left hand on breast, yellow clay with black paint; clay head of an ox: a strip of bone, carved on one side with a flat bead-ornament; miniature vases of grey-blue ware, including one with globular body and spout like one from Petras: and a number of Mycenaean sherds, among them some with marine designs.

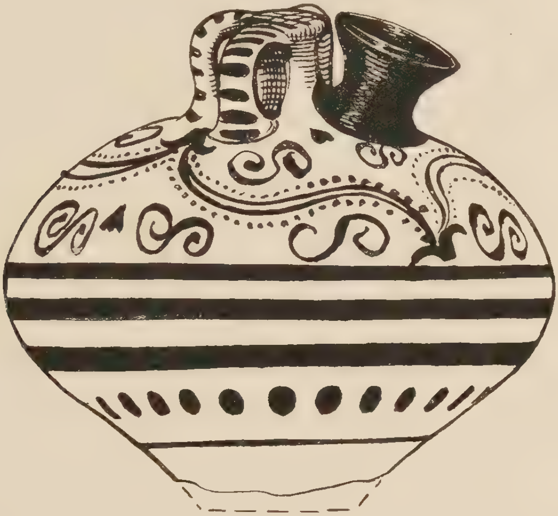


FIG. 26.—PSEUDAMPHORA FOUND IN THE BATH-ROOM (⅓).

The space **22** also was rich in rustic pottery; it is not yet completely excavated. North-west of it, and interrupting the roundabout passage from **5** to **21**, is a deep pit which yielded a bronze ring and a little bronze dove. Room **21** yielded nothing noteworthy except some red wall-plaster, including pieces with modelled convex surface. Space **20**, the doorless compartment beyond, seems to have become a cellar at the reconstruction; the narrow slit between it and the Megaron contained four dozen plain cups whole and many others broken, packed in rouleaux, taller cups and jugs, bones of sheep or goats, bits of obsidian and pumice, a tiny leaf-shaped lamp with rudimentary handle, and—near the bottom—a heap of stucco fragments which when pieced together form part of a pair of "Horns of Consecration," derived probably from a domestic shrine.

The group of rooms **16—19** in the north-west corner require further study before their architectural history can be deciphered. The doorway connecting them with **9** was found blocked. I have kept the interesting groups **10—12—13** and **9—14—15** to the last.

**10** and **13** are magazines communicating with one another but without visible means of ingress from without. They were found stocked with several hundreds of vases, the larger ranged round the walls, the smaller in confused heaps as if fallen from shelves. Probably in the original condition of the house **12** was a vestibule between the street and the court, and there was no partition between **12** and **13**, which gave access to **10**. The built-up stone bench in **10** and remains of a painted plaster floor show that it was a room of importance; in some Turkish houses a reception-room interposed in the same way between the street and the court enables the master to receive visitors without disturbing the women at work in the court. When a second storey was added the openings from **12** into **11** and **13** were blocked, and in **12** was built a staircase 1·90 m. broad, of which three steps remain. It was probably at this time that **10** and **13** became storerooms. In the northern angle of **10** a space measuring ·80 m. × ·90 was found unoccupied, while elsewhere the vases formed a continuous series round the walls; it may mark the position of the entrance.[1] The pottery and other objects found in these two rooms require a detailed description and illustrations for which there is no space in the present article.

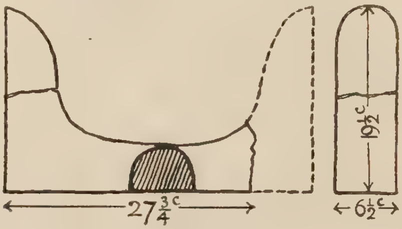


FIG. 27.—STUCCO HORNS.
(The shaded portion shows the section.)

In **12** among the rubble forming the bed for the steps were two stone implements which may have been used by the ancient masons, a greenstone polisher of irregular form, ·13 long, and a much-bruised limestone pounder, ·25 m. long and ·28 in girth.

Room **9** had a floor of stamped clay. The quantity of burned black matter found near the floor showed that the fire extended to this room, which was in use as a lamp-store and may also have contained oil. Several large steatite lamps were found here, calcined by fire; one had a spreading foot ·34 in diameter, another measured ·28 with a column ·11 in diameter. A square lamp or brazier without lips for the wicks, and a cylindrical jar with a spout, also occurred here.

---

[1] The wall has now (April, 1903) been tested at this point, and a doorway, not shown in the plan, has been found, connecting **10** and **7**.

In **14** there are remains of a good flag-pavement. The wall towards the street is so much destroyed that it is uncertain whether there was a door here or not. In the middle of the room is a column-base ·37 m. in diameter. The need of a column here is explained by the discovery immediately over it of a larger column-base (·51 in diameter, ·21 thick) which must have stood in the room above. Marks on the smaller base seem to show that the column which it supported was only ·26 in diameter; the weathering on the bases in the Megaron gives the same diameter for the columns which stood there.

The small room **15**, entered from **14**, had a plastered-floor, which however did not extend beyond the low wall (cross-hatched on plan) dividing the room in two; it is constructed over a rough pavement, and seems to have continued some way up the walls, forming a kind of shallow tank.

All the rooms hitherto described were full of the peculiar crisp red soil formed by the disintegration of the brick-built upper storey—on the south-west it lay 1·25 m. deep; the largest brick found measures ·56 m. by ·42 by ·14, the normal size being about ·40 m. by ·30 by ·10.[1] There can be no doubt that they were originally sun-dried bricks, and were superficially fired in the conflagration which destroyed the upper storey, the proof being that the mud with which they were bonded shows the effects of fire as much as the bricks themselves.

Mixed with the brick-earth were scraps of wall-plaster. Pieces painted with stripes ·04 m. wide in two shades of soft blue came from **5**. Among débris from the room above **10** which had slid down into the courtyard (**11**) were bits with four stripes, red, yellow, red and white, which may have adorned the outside of the wall; walls of sun-dried bricks would of course require the protection of plaster. We have to imagine the upper storeys of Mycenaean Palaikastro painted like Modern Greek churches with red and yellow stripes. The inner walls of the rooms above **10** and **13** were red. From **22** came traces of a pattern, apparently a spiral, in dark red and yellow: from **24**, the small courtyard adjoining **19–21**, plain surfaces of buff and slate-blue. Some of the upper rooms had floors paved with limestone flagging; quantities of it, in some cases reduced by the fire into a sort of slag, were found in **10**, a little in **3** and in **5**, none in **13**. The room above **14** had been floored with kiln-baked earthenware tiles, ·04 thick and at least ·30 square.

The outer walls of the main house are built of irregular pick-dressed cubes of the local limestone; door-sills, pavements and column-bases are formed of a highly stratified lime-stone quarried on Cape Sidhero, while the ashlar blocks are of a dark yellow freestone which is still worked at τὰ Σκαριὰ three miles to the south-east of the ancient town.

Rooms **23–36** were only partially cleared, and it is difficult therefore to discuss their relationship and construction. They do not seem to have had an upper storey, such brick-earth as they contain being derived from the adjacent house. Their covering is tight-packed brown earth with a large admixture of stones, suggesting that the walls were carried up in rubble masonry. **24** was a courtyard. The two doorways leading into it through **23**, a late construction, had been walled up; the discovery of other blocked doorways may simplify the plan which is perplexing as it stands. The upper earth of **24** yielded a coarse green celt, a cornelian bead with scarabaeoid markings, numerous small cups and some good Mycenaean ware; from a lower stratum came a steatite lamp, a bronze chisel, and a large unchipped lump of obsidian. In the angle of **23** were three jugs of the shape of Fig. 20, No. 7, containing well-preserved grain of three kinds, identified by Mr. Percy Newberry, who has been so kind as to examine samples, as wheat (*Triticum vulgare L.*), garden pea (*Pisum sativum L.*), and a smaller pea (*Pisum elatius M. B.*)[1]

---

[1] See the table of brick-dimensions given by Dörpfeld in Schliemann's *Tiryns*, p. 260.

No. **25** contains a rude stone trough and a big jug of common ware with three button-like projections grouped in a triangle below the spout. In **26** was found an orderly deposit of unbroken vases, consisting of two pithoi, a large pseudamphora (ht. ·47), a smaller pear-shaped pseudamphora with degenerate "polyp" ornament (ht. ·28, Plate xvii. Fig. 4.), a steatite bowl with calyx-carving (diam. 13), four large earthenware cups with horizontal handles, six smaller ones with vertical handles, and a remarkable flat-bottomed trough with open ends (·43 m. long, ·31 broad, ·10 high).

Rooms **28–31** may have formed a separate house. The first-named yielded interesting fragments of a bath decorated in Kamáres technique with white sprays on a black ground. In **29** there is evidence of an earlier and a later floor-level; the square pillar belongs to the later; its base is of stone but it was probably continued upwards in mud bricks—the only brick earth noted hereabouts lay close to the base. The three pithoi stand also on the higher floor. Opposite to the pillar at the foot of the east wall was a steatite bowl, ·12 m. in diameter, with a moulded shoulder-pattern, a big pestle of grit, and the stem of a steatite lamp; also two large cylindrical terra-cotta weights, pierced through their axis (ht. ·08 m.)

Nos. **32–36**, so far as can be seen were cellars, No. **33** contained another small deposit, a bronze double axe and a group of three pithoi. The largest (ht. ·74 m.), which was closed with a well-fitting steatite lid and was quite empty, has the flat turn-over lip, upright neck, and ring on the shoulder, which are characteristic of the large "Palace-style" jars, and a painted decoration of sprays, double axes and bold four leaved whorls.

R. C. BOSANQUET.

---

[1] For the original *habitat* of wheat see a paper by Mr. Newberry in Prof. Petrie's *Hawara, Biahmu and Arsinoe*, pp. 49–50. For the garden-pea, cultivated from time immemorial in Europe (Theophrastus, *Hist. Plant.* viii. 3 and 5), and in Egypt from the twelfth dynasty onwards, see his remarks in *Kahun, Gurob and Hawara*, p. 50. *Pisum elatius* is widely distributed in the Southern Mediterranean region.

---

## CORRIGENDA.

P. 139, l. 5, *for* ‘Otus’ *read* ‘Olūs.’

P. 139, l. 6, *for* ‘’Ραῦκος’ *read* ‘‘Ραῦκος.’

P. 144, footnote 1, *insert at end*: Τυλίσιοι (p. 139), if the σ be single, should be added.

P. 154, footnote 3, *for* ‘Skt. *anahas*’ *read* ‘Skt. *andhas.*’

P. 170, *in place of footnote* 2 *substitute*

‘That the clay Bügelkanne existed in Egypt shortly after the time of Thothmes III we know from the occurrence at Tell el-Amarna of fragments of these vases.’

# ANNUAL MEETING OF SUBSCRIBERS.

THE Annual Meeting of Subscribers to the BRITISH SCHOOL AT ATHENS was held in the rooms of the Society of Antiquaries, Burlington House, on October 14th, 1902, THOMAS HODGKIN, Esq., D.C.L., Litt.D., in the Chair. The following Report on the Session 1901–02 was read by the Hon. Secretary (Mr. WILLIAM LORING) on behalf of the Managing Committee :—

The work of the School has been carried on successfully under the Directorship of Mr. Bosanquet during the past Session. The first student to arrive in Athens was Miss Lorimer, Classical Tutor at Somerville College, Oxford, early in October. After some weeks spent in country travel, she settled in Athens, and remained there almost continuously till the beginning of April, devoting the principal part of her time to a study of the red-figured vases of the latter half of the 5th cent. in the Central Museum, and the remainder to attendance at lectures and visits to archaeological sites. Miss Lorimer accompanied the usual German tours in the Peloponnese, among the Islands, and to Troy, in the spring, and visited some of the principal Museums in Europe on her outward and homeward journeys. Another lady student, the Baroness E. Rosenörn-Lehn, (University College, London) in the course of a long season at the School (from the beginning of November to the end of June) applied herself mainly to numismatic studies; making a special investigation of the representations of birds in ancient art, especially on coins, and also adding to her collection of materials for an Index of coin types and symbols, which, if systematically carried out and judiciously arranged, should prove invaluable. The Baroness visited the Museums at Berlin and Munich on the way to Athens, and several museums and sites in Italy on her return. She proposes to continue her studies in Florence, Rome, and Athens, during the coming winter; spending a considerable time in Athens, and resuming her coin work there.

The men students were Mr. M. N. Tod, Scholar of St. John's College, Oxford ('Senior Student'), Mr. F. W. Hasluck, Scholar of King's College, Cambridge ('School Student'), Mr. C. Heaton Comyn, F.R.I.B.A. ('Architectural Student'), Mr. A. P. Oppé (late Exhibitioner of New College, Oxford), and Mr. A. E. Henderson (Architect).

Subscribers who attended last year's Annual Meeting, may remember the hope expressed by the Committee, and more fully dwelt on by the Chairman, Sir Richard Jebb, that funds might some day be found for the endowment of one or more Students or Fellows, pursuing some advanced study or research, holding their stipends for a term of years, and being qualified to assist the Director so far as might be necessary in matters relating to the administration of the School, the conduct of excavations, and the publication of the 'Annual.' The Committee are happy to report, that the design thus sketched out has already been realised by the appointment of Mr. M. N. Tod, the 'Senior Student,' who heads the preceding list, on a fixed agreement for two years (1901–3), with a possibility of renewal. This new form of expenditure, however, seriously reduced the amount available for the work in Crete which will be referred to later. Mr. Tod's special line of study being Epigraphy, he spent much time in the Epigraphic Museum at Athens, under the general direction of Dr. Wilhelm, collating and where necessary preparing for publication a number of difficult 4th cent. inscriptions, which (it is hoped) will shortly appear in the 'Journal of Hellenic Studies.' He also devoted a considerable time to more general archaeological studies, and to travel, and he has proved very useful as an assistant to the Director, more especially in connexion with the Hostel. Next year, he may be able to share with the Director the superintendence of the excavations, and may also help to expedite the work of publishing results, which has latterly fallen somewhat in arrear owing to a concentration of duties in the Director's hands.

Mr. Hasluck arrived, with Mr. Bosanquet, at the beginning of November, and devoted the winter (1) to attendance at archaeological lectures and the acquisition of the modern language, (2) to a comprehensive study, in Athens, of the history and antiquities of Cyzicus, in Asia Minor, with a view to an excavation which was to have been undertaken in the spring. The Committee regret that the proposed excavation was necessarily abandoned, through no fault of Mr. Hasluck, and in spite of repeated efforts at negotiation by the Director. Something, however, was done: for Mr. Hasluck, with the assistance of a grant of £90 voted for that purpose by the Managers of the Craven Fund at Cambridge, proceeded to the site at the end of April, accompanied by Mr. A. E. Henderson, of Constantinople (a former Student of the School), whom he assisted in a careful study and survey of the site itself, as a preliminary to future work upon it. While there, Mr. Hasluck collected some thirty-five unpublished inscriptions and two pieces of archaic sculpture, one of which (a sixth century relief of Herakles) was considered of sufficient value to be removed to the Imperial Museum at Constantinople.

Mr. Comyn was appointed to an 'Architectural Studentship' in connexion with the excavations in Crete. He proved most useful both in the preparation of sketch plans and architectural drawings, and in drawing the more important specimens of pottery; and, before the excavations commenced, he occupied himself in the neighbourhood of Athens by making a complete set of drawings of the beautiful little Byzantine Church at Daou, at the south end of Mount Pentelicus, to which Mr. Bosanquet had invited his attention. After his return from Crete, his services were retained by special arrangement with the Committee, in order that he might superintend the erection of the new balcony of the Macmillan Hostel.

Mr. Oppé, after spending a semester at the University of Berlin, arrived in Athens in April, and (in addition to travel and general archaeology) worked steadily in the Library of the School at the obscure subject of Greek Oracles. He also made a walking tour in Boeotia and elsewhere for the purpose of visiting sites connected with this subject.

Mr. Henderson was readmitted as a Student for the third time, for the special purpose of the Cyzicus survey to which reference has already been made.

On considering the foregoing summary of work and study, the Committee are satisfied that a good class of students has made use of the School, with substantial advantage to themselves and with some actual, and more prospective, gain to archaeological knowledge. But the complete absence of second or third year students (with the single exception of Mr. Henderson) is a disappointing feature from the latter point of view; for the first year's work of any student is almost always to some extent of a preliminary nature, more valuable results being generally obtained at a later stage in his career. The educational value of a single season's travel and study in Greek lands is not to be despised; but, for a good output of original work, continuity in the personnel of the School is greatly to be desired.

On the other hand it is satisfactory to note that the minimum residence of three months in Greek lands, required of all students of the School, has this year been greatly exceeded in the majority of cases, and that no less than four of the students for next session are already doing preparatory work either in Greece itself or in Continental Museums.

Of the preceding year's students, Mr. J. H. Marshall has been appointed Director-General of the Archaeological Survey of India; Mr. Hopkinson has become a Lecturer in Greek at the University of Birmingham; and Mr. Frost, a lecturer in the Training College at Isleworth. Mr. Wells has settled down to the practice of his profession as an architect, and Mr. Penoyre has undertaken a course of Archaeological 'Extension' lectures. Messrs. Fyfe and Mackenzie, formerly students of the School, have served once more as Mr. Evans's assistants at Knossos. Mr. Edgar, formerly a student of the School, and now on the staff of the Museum at Ghizeh, spent some time in Athens, working both on the catalogue of that Museum and on the Report of excavations at Phylakopi.

To the 'Annual,' which appeared in May, Mr. Evans has again been the principal contributor, his paper on 'The Palace of Knossos' occupying about three-fourths of the volume. Other papers were contributed by Mr. Hogarth on his Excavations at Zakro, in Crete, by Prof. Boyd Dawkins on skulls taken from cave-burials in Zakro, and by Dr. Wilhelm, First Secretary of the Austrian School at Athens, on an Athenian Decree which forms part of the Finlay Collection in the Hostel of the British School.

Passing to the work of the Director, the Committee have next to record the preliminary excavation of the early site at Palaikastro, on the eastern coast of Crete. The right to excavate this site had been originally obtained by Dr. Dörpfeld, who afterwards abandoned it in favour of the British. It was understood that Mr. Hogarth should have the first claim to it; but Mr. Hogarth, being unable to work in Crete this year, handed it over to the British School, who took it up on the failure of the negotiations for work at Cyzicus. The excavation was carried out under the supervision of the Director, with the assistance of the 'Architectural Student' appointed for the purpose. Of this excavation, in its different bearings, Mr. Bosanquet, who is here to-day, will give his own account. Suffice it to say that the site has already yielded valuable results, and promises well for the fuller excavation which the Committee hope to undertake next spring if sufficient funds are available. The site appears to have been unoccupied, and almost untouched, from Mycenaean times until the middle of the last century, and contains abundant remains of houses, large and small, of the Mycenaean period, together with numerous tombs and many hundred vases, both of that and of the earlier ('Kamáres') epoch. The methods of burial at this earlier period have been hitherto but little known, and are therefore of especial interest; and, since many of the skulls are well preserved, the Palaikastro tombs provide material for the student of physical anthropology as well as for the antiquarian in the narrower sense. Subscribers will be glad to hear that the British Association has made a grant of £50 for the expenses of an expert, who is to make a special study of these skulls with reference both to other ancient specimens and to living Cretan types.

The work at Palaikastro occupied, however, comparatively little of the Director's time. In Athens he was constantly busy. For, in addition to the ordinary work of administration, and the prolonged negotiations in connexion with Cyzicus, it was necessary to find time for the arduous work of sorting and preparing for publication the last results of those most important excavations at Phylakopi in Melos, which are no doubt still in the memory of subscribers. This labour—a legacy from the time anterior to Mr. Bosanquet's directorship—is now practically complete; and the definitive publication, which has been generously undertaken by the Society for the Promotion of Hellenic Studies, is expected shortly. The finest specimens of pottery from Phylakopi now adorn the Mycenae room in the Central Museum at Athens; and a number of duplicates have been brought home to England, by the courteous permission of the Greek Government, and will be divided between the Ashmolean, Fitzwilliam, and (probably) the British Museums. A full account of the excavations conducted by the School at Praesos in the spring of 1901 is also in preparation, and will appear in the next number of the 'Annual.'

The Library has been well maintained at an expense of rather more than £100; and a fresh catalogue will soon be needed.

The Hostel has been in constant use during the greater part of the year. It was always intended that a balcony should be added to the front of it when funds would permit. This has now been provided by the generosity of a former Director, Mr. Cecil Smith, and adds greatly both to the comfort and to the appearance of the building.

The Directors of other Foreign Schools in Athens have again, as always, proved themselves valuable friends to our Director and Students; and our thanks are especially due to Drs. Dörpfeld, Richardson, and Wilhelm, for the welcome accorded to the latter at their valued lectures. Dr. Schrader, 2nd Secretary of the German School, and Dr. Svoronos, Keeper of the National Collection of Coins, have also earned our especial thanks.

It will be as satisfactory to Subscribers as to the Committee to see the Secretary once more back at his post. Until his return Mr. R. J. G. Mayor, of the Board of Education, most kindly continued to act as deputy, and the best thanks of all are due to him for this friendly service.

The Committee regret to have to report a deficit of £164 on the year's working. Part of this is due to a payment of £50 incurred last year, while the remainder is more than accounted for by a falling off both in subscriptions and in donations. On all grounds it is earnestly to be hoped that this deficiency may be speedily supplied by fresh subscriptions, without which the progress of the work in Crete will be seriously hampered, if not actually arrested.

The adoption of the report was moved by the Chairman. He contrasted the unavoidable dryness and indefiniteness of early Greek History a generation or more ago, when (as Carlyle complained, with reference to Thirlwall's first volume) it was nothing but 'Pelasgians,' 'Leleges,' 'Dolopes,' which were little more than names, with the modern methods of study, pursued continuously by such institutions as the School at Athens, which were gradually shedding light on the early Greek races and enabling us to see them as they lived. He shewed how the boundaries of Greek historical study were being pushed further and further back by researches in Crete and elsewhere. Such episodes as the siege of Troy, which were formerly looked on as beginnings, were now only signposts on the road; we were getting back beyond the Iron age and the Bronze age to the Stone age; and historians were joining hands with men of science on the common meeting ground of anthropology. He also spoke of the beneficent influence of such studies as those pursued jointly by scholars of various nationalities at Athens on international relations.

The motion was seconded by Prof. LEWIS CAMPBELL, and carried.

The Director, Mr. R. C. BOSANQUET, gave a further account of the excavations at Palaikastro, illustrated by lantern slides.

Dr. WALDSTEIN moved, and the Rev. BLOMFIELD JACKSON seconded,—'That Dr. PENROSE, Dr. REID, and Mr. MYRES be re-elected, and that Mr. R. J. G. MAYOR be elected, members of the Committee. That Dr. LEAF be re-elected Hon. Treasurer, Mr. LORING Hon. Secretary, Sir FREDERICK POLLOCK and Mr. EDWIN WATERHOUSE Auditors, for the coming year.' This was carried.

A vote of thanks to the Auditors was moved by Dr. PENROSE, seconded by Mr. F. E. THOMPSON, and carried.

A vote of thanks to the Chairman was moved by Mr. MACMILLAN, and carried by acclamation.

The proceedings then closed.

# THE BRITISH SCHOOL AT ATHENS.

1901–1902.

## RECEIPTS AND EXPENDITURE ON REVENUE ACCOUNT,

4TH OCTOBER, 1901, TO 3RD OCTOBER, 1902.

| | £ | s. | d. |
|---|---|---|---|
| Subscriptions received or due during the year as per account. | 812 | 2 | 0 |
| Government Grant | 500 | 0 | 0 |
| Interest on Investment to 5th July | 56 | 8 | 9 |
| Sale of Annual | 43 | 2 | 7 |
| Balance, being excess of Expenditure over receipts | 36 | 8 | 1 |
| | £1,448 | 1 | 5 |

| | £ | s. | d. | £ | s. | a. |
|---|---|---|---|---|---|---|
| House Maintenance year to Midsummer 1902 | | | | 54 | 7 | 10 |
| Hostel Maintenance year to Midsummer 1902 | 71 | 16 | 5 | | | |
| *Less* Students' Fees | 37 | 14 | 8 | | | |
| | | | | 34 | 1 | 9 |
| Director's Stipend, one year to Midsummer 1902 | | | | 500 | 0 | 0 |
| Publication of Annual | | | | 191 | 11 | 1 |
| Printing, Postage, and Stationery | | | | 14 | 10 | 4 |
| Assistant Secretary's Salary, Hire of Room and Sundries | | | | 11 | 10 | 6 |
| Studentships— | £ | s. | d. | | | |
| R. D. Wells, for 1900–1 | 50 | 0 | 0 | | | |
| M. N. Tod, Senior Student | 150 | 0 | 0 | | | |
| H. Comyn, Architect | 100 | 0 | 0 | | | |
| F. W. Hasluck, Student | 100 | 0 | 0 | | | |
| | | | | 400 | 0 | 0 |
| Excavations | | | | 241 | 19 | 11 |
| | | | | £1,448 | 1 | 5 |

## RECEIPTS AND EXPENDITURE ON CAPITAL ACCOUNT,

4TH OCTOBER, 1901, TO 3RD OCTOBER, 1902.

| | £ | s. | d. |
|---|---|---|---|
| Donations, as per list | 19 | 2 | 0 |
| Balance, being excess of Expenditure over Receipts | 122 | 6 | 9 |
| | £141 | 8 | 9 |

| | £ | s. | d. |
|---|---|---|---|
| Library | 101 | 12 | 3 |
| Hostel Furniture | 39 | 16 | 6 |
| | £141 | 8 | 9 |

## BYZANTINE ARCHITECTURE FUND.

| | £ | s. | d. | | £ | s. | d. |
|---|---|---|---|---|---|---|---|
| Balance from last Account | 55 | 1 | 8 | Printing Circulars | 1 | 5 | 0 |
| | | | | Balance carried forward | 53 | 16 | 8 |
| | £55 | 1 | 8 | | £55 | 1 | 8 |

## CRAVEN GRANT.

| | £ | s. | d. | | £ | s. | d. |
|---|---|---|---|---|---|---|---|
| Grant from Craven Managers, Cambridge, 26th March, 1902 | 90 | 0 | 0 | Expended during the year on Exploration at Cyzicus | 75 | 4 | 10 |
| | | | | Balance, carried forward | 14 | 15 | 2 |
| | £90 | 0 | 0 | | £90 | 0 | 0 |

## BALANCE ACCOUNT, 3RD OCTOBER, 1902.

| | £ s. d. | £ | s. | d. | | £ | s. | d. |
|---|---|---|---|---|---|---|---|---|
| Byzantine Architecture Fund as per Account annexed | | 53 | 16 | 8 | Investment—India 3% Stock, at par | 2,000 | 0 | 0 |
| Craven Grant as per Account annexed | | 14 | 15 | 2 | Studentships—E. L. Forster, paid in advance for 1902–3 | 50 | 0 | 0 |
| Studentships, owing M. N. Tod | | 75 | 0 | 0 | Subscriptions outstanding | 5 | 5 | 0 |
| Subscriptions paid in advance | | 8 | 1 | 0 | Cash at Bank | 522 | 14 | 6 |
| Balance representing the funds of the School other than the property in land and building, furniture and library, as per last account | 2,585 1 6 | | | | | | | |
| *Less* Balance of Receipts and Expenditure on Revenue Account for the year to date as above . £36 8 1 | | | | | | | | |
| Ditto Capital as above . £122 6 9 | 158 14 10 | 2,426 | 6 | 8 | | | | |
| | | £2,577 | 19 | 6 | | £2,577 | 19 | 6 |

Examined and found correct.

EDWIN WATERHOUSE, F.C.A.
LINGEN.
F. POLLOCK.

*3rd December*, 1902.

## DONATIONS—1901-1902.

| | £ | s. | d. |
|---|---|---|---|
| Burnett, J. J. | 1 | 1 | 0 |
| J.D. | 1 | 1 | 0 |
| Egerton, Sir E. H. | 5 | 0 | 0 |
| Palli, Mrs. F. L. | 2 | 0 | 0 |
| Sharpe, Miss C. | 10 | 0 | 0 |
| | £19 | 2 | 0 |

## ANNUAL SUBSCRIPTIONS—1901-1902.

| | £ | s. | d. |
|---|---|---|---|
| HIS MAJESTY THE KING | 25 | 0 | 0 |
| The University of Oxford | 100 | 0 | 0 |
| The University of Cambridge | 100 | 0 | 0 |
| The Hellenic Society | 100 | 0 | 0 |
| The Society of Antiquaries | 5 | 5 | 0 |
| Brasenose College, Oxford | 5 | 0 | 0 |
| Christ Church, Oxford | 20 | 0 | 0 |
| Corpus Christi College, Oxford | 5 | 0 | 0 |
| Magdalen College, Oxford | 10 | 0 | 0 |
| King's College, Cambridge | 10 | 0 | 0 |
| McGill University, Montreal | 5 | 5 | 0 |

| | £ | s. | d. |
|---|---|---|---|
| Agnew, Sir W. | 2 | 2 | 0 |
| Aitchison, G. | 1 | 1 | 0 |
| Allbutt, Prof. | 1 | 1 | 0 |
| Alma Tadema, Sir L. | 2 | 2 | 0 |
| Anderson, F. R. | 1 | 1 | 0 |
| Anson, Sir W. R. | 10 | 0 | 0 |
| Ashby, Thomas | 1 | 1 | 0 |
| Austen Leigh, E. C. | 1 | 1 | 0 |
| Bailey, J. C. | 5 | 0 | 0 |
| Barlow, Sir T. | 1 | 1 | 0 |
| Bosanquet, C. B. P. | 1 | 1 | 0 |
| Bosanquet, R. C. | 1 | 1 | 0 |
| Bodington, Dr. N. | 1 | 0 | 0 |
| Boyle, Miss F. | 1 | 0 | 0 |
| Brinton, H. | 1 | 1 | 0 |
| Brooke, Rev. Stopford | 1 | 1 | 0 |
| Brooks, E. W. | 1 | 0 | 0 |
| Burnett, J. J. | 1 | 1 | 0 |
| Bury, Prof. J. B. | 1 | 1 | 0 |
| Butcher, Prof. | 2 | 2 | 0 |
| Butler, Dr. | 2 | 2 | 0 |
| Buxton, H. E. | 1 | 0 | 0 |
| Campbell, Prof. L. | 1 | 1 | 0 |
| Carlisle, Miss | 1 | 1 | 0 |
| Carr, Rev. A. | 1 | 1 | 0 |
| Carr, H. Wildon | 1 | 1 | 0 |
| Caton, R. | 1 | 1 | 0 |

| | | | |
|---|---|---|---|
| Chawner, W. | 2 | 2 | 0 |
| Clark, C. R. | 1 | 0 | 0 |
| Colchester, Lord | 5 | 0 | 0 |
| Corbett, V. | 1 | 0 | 0 |
| Cole, A. C. | 2 | 2 | 0 |
| Cust, Miss A. M. | 1 | 1 | 0 |
| Clausen, A. C. | 2 | 2 | 0 |
| Cruse, D. A. (Leeds Library) | 1 | 0 | 0 |
| Dabis, Miss | 1 | 1 | 0 |
| Davey, Rt. Hon. Lord | 5 | 0 | 0 |
| Davidson, H. O. D. | 1 | 1 | 0 |
| Donaldson, Rev. S. A. | 1 | 1 | 0 |
| Dyer, Louis | 1 | 0 | 0 |
| Earl, A. G. | 1 | 1 | 0 |
| Egerton, Earl | 10 | 10 | 0 |
| Elliot, Rev. F. R. | 1 | 1 | 0 |
| Elliot, F. E. H. | 1 | 0 | 0 |
| Eumorfopoulos, N. | 1 | 1 | 0 |
| Evans, A. J. | 10 | 0 | 0 |
| Evans, Sir J. | 5 | 0 | 0 |
| Fletcher, H. M. | 1 | 1 | 0 |
| Fort, J. A. | 1 | 0 | 0 |
| Fowler, W. W. | 1 | 1 | 0 |
| Freshfield, D. W. | 10 | 0 | 0 |
| Carried forward | 498 | 0 | 0 |

## ANNUAL SUBSCRIPTIONS 1901–1902 (*continued*).

| | £ | s. | d. |
|---|---|---|---|
| Brought forward | 498 | 0 | 0 |
| Furneaux, L. R. | 1 | 0 | 0 |
| Gardner, Prof. Percy | 2 | 2 | 0 |
| Graham, E. | 1 | 1 | 0 |
| Griffiths, Miss | 1 | 1 | 0 |
| Griffiths, F. M. | 1 | 1 | 0 |
| Giveen, R. L. | 1 | 1 | 0 |
| Haigh, A. E. | 1 | 0 | 0 |
| Hart-Smith, Rev. T. N. | 1 | 1 | 0 |
| Hawes, Miss | 1 | 1 | 0 |
| Hay, C. A. | 5 | 5 | 0 |
| Heberden, C. B. | 2 | 2 | 0 |
| Henderson, A. E. | 1 | 0 | 0 |
| Hill, G. F. | 1 | 1 | 0 |
| Hooper, G. N. | 1 | 1 | 0 |
| James, Rev. S. R. | 2 | 0 | 0 |
| Jones, H. Stuart | 1 | 1 | 0 |
| Kenyon, F. G. | 1 | 1 | 0 |
| L. J. E. | 1 | 0 | 0 |
| Lascelles, B. P. | 1 | 0 | 0 |
| Lawson, Sir E. | 5 | 0 | 0 |
| Leaf, Mrs. C. J. | 5 | 5 | 0 |
| Leaf, Walter | 20 | 0 | 0 |
| Lewis, Mrs. S. S. | 2 | 2 | 0 |
| Lingen, Lord | 2 | 2 | 0 |
| Loring, Miss | 1 | 1 | 0 |
| Lloyd, Miss | 1 | 1 | 0 |
| Lynch, H. F. | 2 | 2 | 0 |
| Macan, R. W. | 1 | 1 | 0 |
| Macmillan, G. A. | 25 | 0 | 0 |
| MacLehose, James J. | 1 | 1 | 0 |
| Marindin, G. E. | 1 | 1 | 0 |
| Mayor, R. J. G. | 1 | 1 | 0 |
| Miller, Rev. A. | 1 | 1 | 0 |
| Mitchell, C. W. | 10 | 0 | 0 |
| Mond, Ludwig | 100 | 0 | 0 |
| Monk, The Misses | 5 | 0 | 0 |
| Morley, Lord | 1 | 1 | 0 |
| Monro, D. B. | 3 | 3 | 0 |
| Morshead, E. D. A. | 1 | 0 | 0 |
| Myers, E. | 1 | 1 | 0 |
| Mylne, Mrs. | 2 | 2 | 0 |
| Newman, W. L. | 2 | 2 | 0 |
| Paul, J. D. | 1 | 1 | 0 |

| | £ | s. | d. |
|---|---|---|---|
| Pawson, A. H. | 2 | 2 | 0 |
| Pelham, Hon. Mrs. Arthur | 1 | 1 | 0 |
| Pesel, Miss Laura | 1 | 0 | 0 |
| Perry, W. C. | 1 | 1 | 0 |
| Phillimore, Prof. J. S. | 1 | 1 | 0 |
| Pollock, Sir F. | 1 | 1 | 0 |
| Poynter, Sir E. J. | 5 | 0 | 0 |
| Rawlinson, W. G. | 1 | 1 | 0 |
| Reid, Dr. | 1 | 1 | 0 |
| Rendall, Dr. | 1 | 1 | 0 |
| Richards, H. P. | 1 | 1 | 0 |
| Robb, Mrs. | 1 | 1 | 0 |
| Roberts, Prof. W. Rhys | 1 | 1 | 0 |
| Sandys, Dr. | 5 | 0 | 0 |
| Seaman, Owen | 1 | 1 | 0 |
| Searle, G. von U. | 1 | 1 | 0 |
| Shove, Miss E. | 1 | 1 | 0 |
| Smith, R. A. H. Bickford | 1 | 1 | 0 |
| Stannus, Hugh | 1 | 1 | 0 |
| Stewart, Mrs. H. F. | 1 | 1 | 0 |
| Tancock, Rev. C. C. | 1 | 1 | 0 |
| Teale, J. Pridgen | 1 | 1 | 0 |
| Thompson, Sir E. M. | 3 | 3 | 0 |
| Thompson, Sir H. | 5 | 0 | 0 |
| Thompson, F. E. | 1 | 1 | 0 |
| Thursfield, J. R. | 1 | 1 | 0 |
| Tozer, Rev. H. F. | 10 | 0 | 0 |
| Tuckett, F. F. | 1 | 0 | 0 |
| Tuke, Miss | 1 | 1 | 0 |
| Vaughan, E. L. | 1 | 0 | 0 |
| Verrall, Dr. | 1 | 1 | 0 |
| Ward, Dr. A. W. | 1 | 0 | 0 |
| Ward, John | 1 | 0 | 0 |
| Warre, Rev. E. | 1 | 1 | 0 |
| Warren, T. H. | 1 | 1 | 0 |
| Waldstein, Dr. | 1 | 1 | 0 |
| Weber, Sir H. | 1 | 1 | 0 |
| Wedgwood, G. | 2 | 2 | 0 |
| Wells, J. | 1 | 1 | 0 |
| Wernher, Julius | 25 | 0 | 0 |
| Wilson R. D. | 1 | 1 | 0 |
| Total* | £812 | 2 | 0 |

| | £ | s. | d. |
|---|---|---|---|
| *Received during the year | 808 | 16 | 0 |
| Outstanding | 5 | 5 | 0 |
| Paid in advance last year | 6 | 2 | 0 |
| | 820 | 3 | 0 |
| Less paid in advance at date | 8 | 1 | 0 |
| | £812 | 2 | 0 |

# LIST OF SUBSCRIBERS.

NOTE. Under No. V. of the Rules and Regulations, "the following shall be considered as Subscribers to the School:—

(1) Donors of £10 and upwards.
(2) Annual Subscribers of £1 and upwards during the period of their subscription.
(3) Corporate bodies subscribing £50 at one time, or £5 annually."

In making out the following list, donations of less than £10 have been regarded as aggregate annual subscriptions of £1, and are spread over a corresponding number of years.

The Treasurer would be glad to be informed of any changes of address or errors in this list, which is made up to April 30th, 1903.

HIS MAJESTY THE KING.
The University of Oxford.
The University of Cambridge.
The McGill University, Montreal.
The Society for the Promotion of Hellenic Studies, 22, Albemarle Street, W.
The Society of Antiquaries, Burlington House, Piccadilly.
The Society of Dilettanti (per E. H. Pember, Esq., K.C., 32, Great George Street, S.W.)
Brasenose College, Oxford.
Christ Church, Oxford.
Corpus Christi College, Oxford.
King's College, Cambridge.
Magdalen College, Oxford.
Newnham College, Cambridge.
The Greek Play Committee (per J. W. Clark, Esq., Scroop House), Cambridge.
The Hon. Company of Clothworkers, Mincing Lane, E.C.

Abercrombie, J., Esq., M.D., 23, Upper Wimpole Street, W.
Acland, Henry Dyke, Esq., Lamorva, Falmouth.
Adam, J., Esq., Emmanuel College, Cambridge.
Agg-Gardner, J. T., Esq., M.P., Carlton Club, Pall Mall, S.W.
Agnew, Sir William, Bart., 11, Great Stanhope Street, Park Lane.
Aitchison, G., Esq., A.R.A., 150, Harley Street, W.
Alexander, W. C., Esq., 24, Lombard Street, E.C.
Alma Tadema, Sir L., R.A., 34 Grove End Road, N.W.
Allbutt, Prof. T. Clifford, F.R.S., St. Rhadegunds, Cambridge.
Anderson, J. R., Esq., Lairbeck, Keswick
Anson, Sir W. R. Bart., M.P., All Souls' College, Oxford.
Ashby, Thos., Esq., c/o J. R. Adams, Esq., 66, Cannon St. E.C.
Austen, The Rev. J. Mason, Edinburgh Mansions, Howick Place, Westminster, S.W.
Austen-Leigh, E. C., Esq., Eton College.
Austen-Leigh, R.A., Esq., 5, New Street Square, E.C.
Avebury, The Right Hon. Lord, High Elms, Farnborough, R.S.O.
Awdry, H., Esq., Wellington College, Wokingham.

Bailey, J. C., Esq., 20, Egerton Gardens, S.W.
Baker, Herbert, Esq., Castle Co. Buildings, Capetown.
Balfour, The Right Hon. G. W., M.P., Board of Trade, Whitehall Gardens, S.W.
Barlow, Sir T., Bart., M.D., 10, Wimpole St., W.
Bather, Rev. A. G., 8, Kingsgate Street, Winchester.
Bell, Miss Spencer, 1, Devonshire Place, W.
Billson, Charles J. Esq., The Wayside, Oadby, Leicestershire.
Bodington, N., Esq., Litt.D., The Yorkshire College, Leeds.
Bosanquet, C. B. P., Esq., Rock Hall, Alnwick.
Bosanquet, R. C., Esq., British School, Athens.
Boyle, Miss Florence, c/o Dr. Eady, Inglaws Lodge, Enfield, N.
Branch, C. C. Esq., 67, Chester Square, S.W.
Brassey, The Right Hon. Lord, 4, Great George Street, S.W.
Brinton, Hubert, Esq., Eton College.
Brooke, The Rev. Stopford, 1, Manchester Sq., W.
Brooks, E. W., Esq., 28, Great Ormond Street, W.C.
Brown, James, Esq., Netherby, Galashiels.
Brown, Adam, Esq., Netherby, Galashiels.
Burdett-Coutts, The Baroness, Holly Lodge, Hampstead.
Burnet, J. J., Esq., 167, St. Vincent Street, Glasgow.
Bury, Prof. J. B., Trinity College, Cambridge.
Butcher, Professor, 27, Palmerston Place, Edinburgh.
Butler, The Very Rev. Dr., Master of Trinity College, Cambridge.
Buxton, A. F., Esq., 50, Cornhill, E.C.
Buxton, F. W., Esq., 50, Cornhill, E.C.
Buxton, H. E., Esq., Fritton, Great Yarmouth.
Bywater, Mrs., 93, Onslow Square, S.W.
Bywater, Prof. Ingram, 93, Onslow Square. S.W.

Campbell, The Rev. Prof. L., 33, Campden House Chambers, W.
Carlisle, Miss Helen, Houndhill, Marchington, Stafford.
Carr, H. Wildon, Esq., 25, Cumberland Terrace, Regent's Park, N.W.
Carr, Rear-Admiral, United Service Club, Pall Mall, S.W.
Carr, The Rev. A., Addington Vicarage, Croydon.
Caton, R. Esq., M.D., Lea Hall, Gateacre, Liverpool.
Chamberlain, The Right Hon. J., M.P., 40, Prince's Gardens, S.W.
Chamberlain, J. Austen, Esq., M.P., 40, Prince's Gardens, S.W.
Chambers, Colonel O., E. I. United Service Club, 16, St. James's Square, W.
Chawner, W., Esq., Master of Emmanuel College, Cambridge.
Christie, John, Esq., Henleighs, Kingston Hill, Surrey.
Clark, C. R., Esq., 20, Cowley Street, Westminster, S.W.
Clauson, A. C., Esq., 12, Park Place Villas, Paddington Green, W.
Clissold, H., Esq., Clifton College, Bristol.
Colchester, The Right Hon. Lord, St. Bruno, Sunningdale.
Cole, A. C., Esq., 64, Portland Place, W.
Colvin, Sidney, Esq., British Museum, W.C.
Connal, William, Esq., 23, Berkeley Sq., W.
Corbett, V., Esq., British Legation, Athens.
Cowper, The Right Hon. Earl, Panshanger, Hertford.
Cruddas, Miss, Haughton Castle, Humshaugh-on-Tyne, Northumberland.
Cruse, D. A., Esq. (Librarian), Leeds Library, Commercial Street, Leeds.
Cust, Miss A. M., 63, Elm Park Gardens, S.W.

Dabis, Miss, c/o Mrs. Mond, 20, Avenue Road, Regent's Park, N.W.
Dakyns, H. G., Esq., Higher Coombe, Haslemere.
Dalton, Rev. H. A., School House, Felsted.
Daniel, A. M. Esq., Saxifield, Filey Road, Scarborough.
Darbishire, R. D. Esq., 1, St. James's Square, Manchester.
Darwin, Prof. G. H., F.R.S., Cambridge.
Davey, The Right Hon. Lord, 86, Brook Street, W.
Davidson, H. O. D., Esq., Harrow.
Deeley, R. M., Esq., 38, Charnwood St., Derby.
Devenish, W. H. Esq., 15, Downe Terrace, Richmond.
Dilke, The Right Hon. Sir C. W., Bart., M.P., 76, Sloane Street, S.W.
Donaldson, The Rev. S. A., Eton College.
Douglas-Pennant, The Hon. Alice, Mortimer House, Halkin Street, W.
Durham, The Right Hon. The Earl of, 4, Cavendish Square, W.
Durnford, Walter, Esq., King's College, Cambridge.
Dyer, Louis, Esq., Sunbury Lodge, Banbury Road, Oxford.

Earl, A. G., Esq., Ferox Hall, Tonbridge.
Egerton, Sir E. H., K.C.B., H.B.M. Minister, British Legation, Athens.
Egerton, The Right Hon. Earl, 7, St. James's Square, S.W.
Elliot, Francis E. H., Esq., British Agency, Sofia.
Elliot, The Rev. F. R., British Legation, Athens.
Eumorfopoulo, N., Esq., 33, Gloucester Square, Hyde Park. W.
Evans, Arthur J., Esq., LL.D., F.R.S., Ashmolean Museum, Oxford.
Evans, Sir John, K.C.B., D.C.L F.R.S., Nash Mills, Hemel Hempstead.
Ewart, Miss, 68, Albert Hall Mansions, S.W.

Farrer, Sir W. J., Sandhurst Lodge, Wellington College Station, Berks.
Fletcher, H. M., Esq., 10, Lincoln's Inn Fields, W.C.
Fletcher, John M., Esq., 9, Stanhope Street, Hyde Park, W.
Fort, J. A., Esq., 69, Kingsgate Street, Winchester.
Fowler, W. W., Esq., Lincoln College, Oxford.
Fraser, J. H. P., Esq., M.D., Cumberland House, Southampton.
Freshfield, D. W., Esq., 1, Airlie Gardens, W.
Freshfield, Dr. Edwin 31, Old Jewry, E.C.
Frisch, E. S. Esq., Elmsleigh, Princes Park, Liverpool.
Frost, W. E. Esq., Ardvreck, Crieff, Perthshire.
Fry, The Right Hon. Sir Edward, F.R.S., Failand House, Bristol.
Furneaux, L. R., Esq., Rossall School, Fleetwood.
Fyfe, John, Esq., Beechgrove House, Aberdeen.

Gardner, Prof. Ernest, University College, Gower Street, W.C.
Gardner, Prof. Percy, Litt.D., 12, Canterbury Road, Oxford.
Gardiner, E. Norman, Esq., 2, The College, Epsom.
Giveen, R. L., Esq., 66, Myddelton Square, E.C.
Goldsmith, Harvey, Esq., M.D., Harpur Place, Bedford.
Gow, Rev. James, Litt.D., Dean's Yard, Westminster, S.W.
Gooch, G. P., Esq., 8, Porchester Gate, W.
Graham, Alex., Esq., Carlton Chambers, 4, Regent Street, S.W.
Graham, E., Esq., Grove Hill, Harrow.
Griffith, F. Ll., Esq., Riversvale, Ashton-under-Lyne.

Haigh, A. E., Esq., 2, Crick Road, Oxford
Handcock, W. Esq., Girlington, Bradford, Yorks.
Hardy, Mrs., 1, Cadogan Square, S.W.
Harrison, Miss, LL.D., Newnham College, Cambridge.
Hart-Smith, The Rev. T. N., The College, Epsom.
Hawes, Miss, 89, Oxford Terrace, W.
Haworth, Jesse, Esq., Woodside, Bowdon.
Hay. C. Anderson, Esq., 127, Harley Street, W.
Heath, Mrs. Meyrick, Mortimer House, Clifton, Bristol.
Headlam, Walter, Esq., King's College, Cambridge.
Heberden, C. B., Esq., Principal of Brasenose College, Oxford.
Henderson, A. E. Esq., c/o Architectural Association, 58, Great Marlborough Street, W.
Hill, G. F., Esq., British Museum, W.C.
Hodgkin, Thomas, Esq., Litt. D., Barmoor Castle, Beal, Northumberland.
Hodgkin, J. Edward, Esq., Whiteknights, Bellegrove, Newcastle on Tyne.
Hodgkin, Miss Violet, Barmoor Castle, Beal, Northumberland.
Hogarth, D. G., Esq., 23, Alexander Sq., S.W.
Hooper, G. N. Esq., Elmleigh, Beckenham, Kent.
Hornby, The Rev. Dr., Provost of Eton College, Windsor.
Howden, Dr. Ian, 6, Cambridge Terrace, Dover.

Irving, Sir Henry, Drury Lane Theatre, W.C.
Iveagh, The Right Hon. Lord, 5, Grosvenor Place, S.W.

James, Rev. S. R., School House, Malvern.
James, The Rev. H. A., D.D., School House, Rugby.
Jebb, Prof. Sir Richard, Litt. D., M.P., Springfield, Cambridge.
Jenner, Miss, 39, Addison Road, W.
Johnston, C. E., Esq., 23, Queen's Gate Terrace, S.W.
Jones, H. Stuart, Esq., Trinity College, Oxford.

Kelly, Charles Arthur, Esq., 30, Cheyne Walk, Chelsea.
Kenyon, F. G., Esq., Litt.D., British Museum, W.C.
Keser, J., Esq., M.D., Colatal, Chemin Vinet, Lausanne, Switzerland.
King, Miss Catherine, Oxton, Birkenhead.
Knowles, James, Esq., Queen Anne's Lodge, St. James's Park, S.W.

Lambert, Dr. E. J.
Lascelles, B. P., Esq., Harrow.
Lawrence, Sir Edwin, Bart., M.P., 13, Carlton House Terrace, S.W.
Lawrence, The Misses, 4, Princes Gate, S.W.
Lawson, Sir E., Bart., *Daily Telegraph*, Fleet Street, E.C.
Leaf, Herbert, Esq., The Green, Marlborough.
Leaf, Mrs. Herbert, ,, ,,
Leaf, Walter, Esq., Litt.D., 6, Sussex Place, Regent's Park, N.W.
Lewis, Mrs. S. S., Castle-brae, Cambridge.
Lindley, Miss Julia, 74, Shooter's Hill Road, Blackheath, S.E.
Lingen, The Right Hon. Lord, K.C.B., 13, Wetherby Gardens, S.W.
Lister, The Right Hon. Lord, P.R.S., 12, Park Crescent, Portland Place, W.
Livesay, William, Esq. M.D., Sudbury, Derby.
Llangattock, The Right Hon. Lord, The Hendre, Monmouth.
Lloyd, Miss A. M., Caythorpe Hall, Grantham.
Lorimer, Miss H. L., Somerville College, Oxford.
Loring, Miss, 14, Montagu Street, Portman Square, W.
Loring, W., Esq., 2, Hare Court, Temple, E.C.
Lucas, Sir Thomas, Bart., 12a, Kensington Palace Gardens, W.
Lucas, Rev. A., Parkside, Tonbridge,
Lynch, H. F., Esq., 33, Pont Street, S.W.

Macan, R. W., Esq., University College, Oxford.
MacLehose, James J., Esq., 61, St. Vincent Street, Glasgow.
Macmillan, G. A., Esq., D. Litt., St. Martin's Street, W.C.
Macmillan, Messrs., & Co., Ltd., St. Martin's Street, W.C.
Mansford, C. Jodrell, Esq., The School, Dartford.
Marindin, G. E., Esq., Chesterton, Bridgnorth, Salop.
Markby, A., Esq., Copse Hill, Wimbledon.
Marshall, Miss A. M. C., Barthomley, nr. Crewe.
Mayor, R. J. G., Esq., Board of Education, Whitehall, S.W.
Miller, The Rev. Alex., South United Free Church Manse, Buckie, N.B.
Mitchell, C. W., Esq., 195, Queen's Gate, S.W.
Mocatta, F. D., Esq., 9, Connaught Place, Edgware Road, W.
Mond, Ludwig, Esq., F.R.S., 20, Avenue Road, Regent's Park, N.W.
Monk, The Misses, 4, Cadogan Square, S.W.
Monro, D. B., Esq., Provost of Oriel College, Oxford.
Monson, His Excellency the Right Hon. Sir E., G.C.B., G.C.M.G., British Embassy, Paris.
Montagu, Sir S., Bart., M.P., 12, Kensington Palace Gardens, S.W.
Montefiore, C. G., Esq., 12, Portman Square, W.
Morley, The Right Hon. The Earl of, 31, Prince's Gardens, S.W.
Morshead, E. D. A., Esq., Grafton Villa, Winchester.
Murray, Messrs. J. & H., 50, Albemarle Street, W.
Murray, Prof. G. G. A., Barford, Churt, Farnham, Surrey.
Myers, Ernest, Esq., Brackenside, Chislehurst.
Mylne, Mrs., 83, Gloucester Terrace, Hyde Park, W.
Myres, J. L., Esq., Christchurch, Oxford.

Newman, W. L., Esq., 1, Pittville Lawn, Cheltenham.

Olding, Mrs., Lissant House, Upper Long Ditton.
Oswald, J. W. Gordon, Esq. (of Aigas), Beauly, Inverness-shire, N.B.

Paton, W. R., Esq., British Post Office, Smyrna.
Paul, J. D., Esq., Town End Close, Knighton, Leicester.
Pawson, A. H., Esq., Farnley, Leeds
Pears, E., Esq., 2, Rue de la Banque, Constantinople.
Pease, Mrs. J. W., Pendower, Newcastle on Tyne.
Pelham, Prof. H. F., President of Trinity College, Oxford.
Pelham, The Hon. Mrs. Arthur, 15, Duke Street, Manchester Square.
Perry, W. C., Esq., 5, Manchester Square, W.
Pesel, Miss Laura, Oak House, Bradford, Yorks.
Pesel, Miss Louisa, Royal Hotel, Athens.
Phillimore, Prof. J. S., 5, The University, Glasgow.
Pilkington, A. C., Esq., Rocklands, Rainhill, Lancashire.
Pilkington, R. A., Esq., The Hazels, Prescot, Lancs.
Plumbe, Rowland, Esq., 13, Fitzroy Square, W.
Pollock, Sir F., Bart., 48, Great Cumberland Place, W.
Poynter, Sir E. J., P.R.A., 28, Albert Gate, S.W.

Ralli, Mrs. S., St. Catherine's Lodge, Hove, Sussex.
Ralli, P., Esq., 17, Belgrave Square, W.
Rawlinson, W. G., Esq., Hill Lodge, New Road, Campden Hill, W.
Reid, Prof. J. S., Litt.D., Caius College, Cambridge.
Rendall, The Rev. G. H., Litt.D., Charterhouse, Godalming.
Richards, H. P., Esq., Wadham College, Oxford.
Richmond, The Right Rev. The Bishop of, the Rectory, Stanhope R.S.O., Co. Durham.
Robb, Mrs., 46, Rutland Gate, S.W.
Roberts, Prof. W. Rhys, University College, Bangor.
Rosebery, The Right Hon. the Earl of, K.G., The Durdans, Epsom.
Rothschild, The Right Hon. Lord, 148, Piccadilly, W.
Rothschild, Messrs. N. M.,and Sons, New Court, E.C.
Rothschild, The Hon. Walter, 148, Piccadilly, W.
Rumbold, His Excellency Sir Horace, Bart., G.C.B., British Embassy, Vienna.

Salisbury, The Most Hon. the Marquis of, K.G., Arlington Street, W.
Sandys, J. E., Esq., Litt.D., St. John's College, Cambridge.
Saumarez, The Right Hon. Lord de, Shrubland Park, Coddenham, Suffolk.
Scott, C. P., Esq., The Firs, Fallowfield, Manchester.
Seaman, Owen, Esq., Tower House, Putney, S.W.
Searle, G. von U., Esq., 30, Edith Road, West Kensington, W.
Sharkey, J. A., Esq., Christ's College, Cambridge.
Sharpe, Miss C., Stoneycroft, Elstree.
Shove, Miss E., 25, St. Martin's Crescent, Regent's Park, N.W.
Simpson, W. W., Esq., Winkley, Whalley.
Smith, Cecil H., Esq., LL.D., British Museum, W.C.
Smith, Mrs. C. H., 18, Earl's Terrace, Kensington, W.

Smith, J. G., Esq.
Smith, R. A. H. Bickford, Esq., 29, Ladbroke Grove, W.
Southwell, The Right Rev. the Bishop of, Thurgarton Priory, Notts.
Stannus, Hugh, Esq., 64, Larkhall Rise, Clapham, S.W.
Steinkopff, E., Esq., 47, Berkeley Square, W.
Stewart, Mrs. H. F., 5, Adams Road, Cambridge.
Sullivan, John, Esq., 32, Fitzwilliam Square, Dublin.

Tancock, The Rev. C. C., The School, Tonbridge.
Taylor, The Rev. Dr., Master of St. John's College, Cambridge.
Taylor, J. E., Esq., 20, Kensington Palace Gardens, W.
Teale, J. Pridgin, Esq., F.R.S., 38, Cookridge Street, Leeds.
Thompson, Sir E. M., K.C.B., British Museum, W.C.
Thompson, Sir Henry, Bart., 35, Wimpole Street, W.
Thompson, H. Y., Esq., 19, Portman Square, W.
Thompson, F. E., Esq., 16, Primrose Hill Road, N.W.
Thursfield, J. R., Esq., Fryth, Great Berkhampstead.
Tozer, The Rev. H. F., 18, Norham Gardens, Oxford.
Tuckett, F. F., Esq., Frenchay, Bristol.
Tuke, Miss Margaret, Newnham College, Cambridge.

Vaughan, H., Esq.
Vaughan, E. L., Esq., Eton College.
Verrall, A. W., Esq., Litt.D., Selwyn Gardens, Cambridge.
Vince, J. H. Esq., Bradfield College, Berkshire.

Waldstein, Charles, Esq., Litt.D., King's College, Cambridge.
Wandsworth, The Right Hon. Lord, 10, Great Stanhope Street, W.
Wantage, The Lady, 2, Carlton Gardens, S.W.
Ward, John, Esq., F.S.A., Lenoxvale, Belfast.
Warre, The Rev. E., D.D., Eton College, Windsor.
Warren, T. H., Esq., President of Magdalen College, Oxford.
Waterhouse, Edwin, Esq., Feldemore, near Dorking.
Weber, Sir. H., M.D., 10, Grosvenor Street, W.
Wedgwood, G., Esq., Idle Rocks, Stone, Staff.
Wells, J., Esq., Wadham College, Oxford.
Wernher, Julius, Esq., 82, Piccadilly, W.
West, H. H., Esq., c/o R. W. West, Esq., Casa Bianca, Alassio, N. Italy.
Whateley, A. P., Esq., 4, Southwick Crescent, W.
Wilson, R. D., Esq., 38, Upper Brook Street, W.
Wilson, Robert, Esq., 7, St. Andrew's Place, Regent's Park, N.W.
Wimborne, The Right Hon. Lord, 22, Arlington Street, S.W.
Winkworth, Mrs., Holly Lodge, Campden Hill, W.
Wroth, Warwick, Esq., British Museum, W.C.

Yates, Rev. S. A. Thompson, 43, Phillimore Gardens, W.
Yorke, V. W., Esq., Forthampton Court, Tewkesbury.
Yule, Miss A., Tarradale House, Ross-shire.

# DIRECTORS OF THE SCHOOL.

1886—1902.

F. C. PENROSE, M.A., D.C.L., LL.D., F.R.S., 1886—1887.
ERNEST A. GARDNER, M.A., 1887—1895.
CECIL H. SMITH, LL.D., 1895—1897.
DAVID G. HOGARTH, M.A., 1897—1900.
R. CARR BOSANQUET, M.A., 1900—

# STUDENTS OF THE SCHOOL.

1886—1902.

| | |
|---|---|
| Ernest A. Gardner, | Formerly Fellow of Gonville and Caius College, Cambridge, and Craven University Student. Admitted 1886—87, Director of the School, 1887—1895. Yates Professor of Archaeology at University College, London. |
| David G. Hogarth, | Fellow and formerly Tutor of Magdalen College, Oxford, and first Craven Fellow. Director of the School 1897—1900. Admitted 1886—87. Re-admitted (for work in Cyprus) 1887—88. |
| Rupert Clarke, | Exeter College, Oxford. Admitted 1886—87. |
| F. H. H. Guillemard, | Gonville and Caius College, Cambridge. First University Reader in Geography. Admitted (for work in Cyprus) 1887—88. |
| Montague R. James, | Fellow and late Tutor of King's College, Cambridge ; Director of the Fitzwilliam Museum. Admitted (for work in Cyprus) 1887—88, with grant of £100 from the University. |
| R. Elsey Smith, | Professor of Architecture and Construction, King's College, London. Appointed to Studentship by Royal Institute of British Architects, 1887—88. |
| Robert Weir Schultz, | Admitted as Travelling Student and Gold Medallist of the Royal Academy, 1887—88. Re-admitted 1888—89, 1889—90. |
| Sidney H. Barnsley, | Admitted as Student of the Royal Academy, 1887—88. Re-admitted 1889—90, 1890—91. |
| J. A. R. Munro, | Fellow and Tutor of Lincoln College, Oxford. Admitted (for work in Cyprus) 1888—89. Re-admitted (for same purpose) 1889—90. |

| | |
|---|---|
| H. Arnold Tubbs, | Pembroke College, Oxford; Craven University Fellow. Professor of Classics at University College, Auckland, N.Z. Admitted (for work in Cyprus) 1888—89. Re-admitted (for same purpose) 1889—90. |
| James G. Frazer, | Fellow of Trinity College, Cambridge. Admitted 1889—90 with grant of £100 from the University of Cambridge collect material for commentary on Pausanias. |
| William Loring, | Late Fellow of King's College, Cambridge. Examiner in the Board of Education. Secretary of the School since 1897. Appointed to Cambridge Studentship, 1889—90. Re-admitted as Craven University Student, 1890—91, 1891—92, and 1892—93. |
| W. J. Woodhouse, | Queen's College, Oxford. Professor of Greek in the University of Sydney, N.S.W. Formerly Lecturer in Ancient History and Political Philosophy at the University of St. Andrew's. Appointed to Oxford Studentship, 1889—90. Re-admitted as Craven University Fellow, 1891—92 and 1892—93. |
| G. C. Richards, | Late Fellow of Hertford College; Lecturer at Oriel College, Oxford. Formerly Professor of Greek at University College, Cardiff. Admitted as Craven University Fellow, 1889—90. Re-admitted 1890—91. |
| O. H. Parry, | Magdalen College, Oxford. Archbishop's Missioner to the Nestorian Christians. Admitted 1889—90. |
| J. R. Stainer, | Magdalen College, Oxford. Admitted 1889—90. |
| R. A. H. Bickford-Smith, | Trinity College, Cambridge. Admitted 1889—90. |
| A. G. Bather, | Late Fellow of King's College, Cambridge; Assistant Master at Winchester College. Admitted 1889—90. Re-admitted 1891—92, on appointment to the Cambridge Studentship 1892—93 as Prendergast Greek Student; and again, 1893—94, as Cambridge Student. |
| E. E. Sikes, | Fellow and Tutor of St. John's College, Cambridge. Appointed to Cambridge Studentship, 1890—91. |
| J. G. Milne, | Corpus Christi College, Oxford. Examiner in the Board of Education. Appointed to Oxford Studentship, 1890—91. |
| H. Stuart Jones, | Fellow and Tutor of Trinity College, Oxford. Director-elect of the British School at Rome. Admitted as Craven University Fellow, 1890—91. Re-admitted 1892—93. |
| Miss Eugénie Sellers, | Admitted 1890—91. (Mrs. S. Arthur Strong.) |
| F. B. Baker, | Christ's College, Cambridge. Assistant Master at Malvern College. Admitted 1891—92. |
| C. C. Inge, | Magdalen College, Oxford. Appointed 1891—92 to the Oxford Studentship. |
| E. F. Benson, | King's College, Cambridge. Admitted 1891—92, with grant of £100 from the Worts Fund at Cambridge; 1892—93 on appointment to the Cambridge Studentship; 1893—94 as Craven Student; and 1894—95 as Prendergast Student. |
| J. G. Smith, | Magdalen College, Oxford. Admitted 1891—92. Re-admitted 1895—96. |
| V. W. Yorke, | Late Fellow of King's College, Cambridge. Admitted 1892—93. Re-admitted 1893—94. |

| | |
|---|---|
| J. L. Myres, | Student and Lecturer of Christ Church, and late Fellow of Magdalen College, Oxford. Admitted 1892—93. Re-admitted 1893—94, and 1894—95 as Craven Fellow. |
| R. J. G. Mayor, | Late Fellow of King's College, Cambridge. Examiner in the Board of Education. Admitted 1892—93. |
| R. Carr Bosanquet, | Trinity College, Cambridge. Assistant Director of the School, 1899—1900. Director since 1900. Admitted 1892—93. Re-admitted as Craven University Student 1894—95, 1895—96, and 1896—97. |
| J. M. Cheetham, | Christ Church, Oxford. Admitted on appointment to the Oxford Studentship. 1892—93. |
| E. R. Bevan, | New College, Oxford. Admitted 1893—94. |
| A. F. Findlay, | Sent out from Aberdeen by the United Presbyterian Church of Scotland. Admitted 1894—95. |
| T. Duncan, | Sent out from Aberdeen by the Church of Scotland. Admitted 1894—95. |
| J. E. Brooks, | St. Peter's College, Cambridge. Admitted 1894—95. Re-admitted as Associate 1896—97. |
| H. Awdry, | New College, Oxford. Assistant Master at Wellington College. Admitted 1894 – 95. |
| Duncan Mackenzie, | Universities of Edinburgh and Vienna. Admitted 1895—6. Re-admitted 1896—97, 1897—98 and 1898—99. |
| Archibald Paterson, | University of Edinburgh. Admitted 1895—96. |
| Charles R. R. Clark, | Appointed 1895—96, and re-appointed 1896—97, by the Managing Committee to an Architectural Studentship. |
| C. C. Edgar, | Oriel College, Oxford. English Member of the Cataloguing Committee, Ghizeh Museum. Admitted 1895—96, and re-admitted 1896—97 (as Craven University Fellow), 1897—98 and 1898—99. |
| F. R. Earp, | Late Fellow of King's College, Cambridge. Admitted 1896—97. |
| F. A. C. Morrison, | Jesus College, Cambridge. Admitted (as Prendergast Greek Student) 1896—97. |
| H. H. West, | Trinity College, Cambridge. Admitted 1896—97. |
| Miss C. A. Hutton, | Girton College, Cambridge. Admitted 1896—97. |
| Pieter Rodeck, | Architect to Arab Monuments Committee, Cairo. Admitted 1896—97 as Travelling Student and Gold Medallist of the Royal Academy. |
| J. G. C. Anderson, | Late Fellow of Lincoln College, Student and Lecturer of Christ Church, Oxford. Admitted (as Craven University Fellow) 1896—97. |
| J. W. Crowfoot, | Brasenose College, Oxford. Education Department, Cairo. Formerly Lecturer in Classics, Mason College, Birmingham. Admitted, on appointment to the Oxford Studentship, 1896—97. Re-admitted 1897—98. |
| W. W. Reid, | Universities of Aberdeen and Edinburgh. Admitted, as holder of Blackie Travelling Scholarship, 1896—97. |
| A. E. Henderson, | Gold Medallist and Travelling Student of the Royal Academy. Admitted 1897—98. Re-admitted 1898—99 and 1901—02. |

| | |
|---|---|
| W. A. Curtis, | Heriot Scholar of Edinburgh University. Admitted 1897—98. |
| A. J. Spilsbury, | Queen's College, Oxford. Admitted 1897—98, on appointment to the Oxford Studentship. |
| E. B. Hoare, | Magdalen College, Oxford. Admitted 1897—98, as Architectural Student. |
| J. C. Lawson | Fellow and Lecturer of Pembroke College, Cambridge. Admitted as Craven University Student, 1898—99. Re-admitted 1899—1900. |
| C. D. Edmonds, | Emmanuel College, Cambridge. Assistant Master at Elstree School. Admitted as Prendergast Student, 1898—99. |
| J. H. Marshall, | King's College, Cambridge. Director-General of the Archaeological Survey of India. Admitted, 1898—99. Re-admitted as Prendergast Student 1900—01 |
| Clement Gutch, | King's College, Cambridge. Lecturer at Girton College Admitted, 1898—99. |
| F. B. Welch, | Magdalen College, Oxford. Assistant Master at Pocklington School. Admitted as Craven University Fellow, 1898—99. Re-admitted 1899—1900. |
| T. D. Atkinson, | Secretary of Cambridge Antiquarian Society. Admitted as Architectural Student, 1898—99. |
| J. K. Fotheringham, | Merton and Magdalen Colleges, Oxford. Admitted on appointment to Oxford Studentship, 1898—99. |
| J. H. Hopkinson, | University College, Oxford. Lecturer in Greek, University of Birmingham. Admitted as Craven University Fellow, 1899—1900 and 1900—01. |
| S. C. Kaines-Smith, | Magdalene College, Cambridge. Admitted 1899—1900, on appointment to Cambridge Studentship. |
| Miss O. C. Köhler, | Girton College, Cambridge. Admitted 1899—1900. |
| D. Theodore Fyfe, | Admitted 1899—1900, on appointment to Architectura Studentship. Architect to the Cretan Exploration Fund. |
| K. T. Frost, | Brasenose College, Oxford. Admitted on appointment to the Oxford Studentship, 1900—01. |
| R. D. Wells, | Trinity College, Cambridge. Admitted on appointment to the Architectural Studentship, 1900—01. |
| J. ff. Baker-Penoyre, | Keble College, Oxford. Librarian of the Society for Promoting Hellenic Studies. Admitted 1900—01. |
| Marcus N. Tod, | Senior Scholar of St. John's College, Oxford; Craven University Fellow; Assistant-Director of the School. Admitted on appointment to "Senior Studentship," 1901–02. |
| F. W. Hasluck, | King's College, Cambridge. Admitted on appointment to Cambridge Studentship, 1901—02. |
| C. Heaton Comyn, | F.R.I.B.A. Admitted on appointment to the Architectural Studentship, 1901—02. |
| Miss H. L. Lorimer, | Girton College, Cambridge. Classical Tutor of Somerville College, Oxford. Admitted as Pfeiffer Travelling Student, 1901—02. |
| Baroness E. Rosenörn-Lehn, | Royal Holloway College, and University College, London. Admitted 1901—02. |
| A. P. Oppé, | New College, Oxford. Assistant Professor of Greek at St. Andrew's University. Admitted 1901—02. |

# ASSOCIATES OF THE SCHOOL.

| | |
|---|---|
| Professor J. B. Bury, | Trinity College, Cambridge. Admitted 1895—96. |
| Rev. A. H. Cruickshank, | The College, Winchester. Admitted 1895—96. |
| Arthur J. Evans, L.L.D., F.R.S. | Keeper of the Ashmolean Museum, Oxford. Admitted 1895—96. |
| Ambrose Poynter, | Admitted 1896—97. |
| J. E. Brooks, | A former Student of the School. Admitted 1896—97. |
| J. L. Myres, | Student of Christ Church, Oxford; a former Student of the School. Admitted 1896—97. |
| Professor E. A. Gardner, | Formerly Director of the School. Admitted 1897—98. |

## METHODS OF WORK AND TEACHING.

*Extracted from a recent report of the present Director to the Managing Committee.*

UNDER an ideal system most students would spend two, some three, seasons in Greece, devoting *the first year to general studies, the second to some special subject.*

During the first year a man need not lose sight of his special subject, but in most cases it would pay him to adopt something like the following programme:

[August and] *September.* In Berlin (Munich, Dresden) to become familiar with spoken German and so be able to profit by some of the 3 or 4 courses of lectures given by the Secretaries of German and Austrian Institutes.

*October.* Arrive in Greece. Face the difficulties of language and travelling. See Olympia, Delphi, Mycenae, Epidaurus, the Heraeum near Argos, before the rains begin in November.

About *November* 15. Settle down in Hostel for 3 or 4 months of steady work on sites and in Museums, attending some of the half-dozen available courses of lectures, and making frequent short excursions into the country, by train, bicycle, carriage, or on mule-back. A bicycle is invaluable.

This residence in the Hostel, with occasional absences for a few nights in the country, should last until the beginning or middle of March according to the season.

*March, April.* Travel, study ancient sites.

If possible join one of the island-cruises to which Professor Gardner and Professor Dörpfeld have hospitably admitted students in the past.

*May, June.* Begin to concentrate attention on special work: *e.g.* a man may assist in excavations, with a view to working upon the results during the coming year and excavating with more or less complete control or independence in his second summer: or he may explore a given district in Greece or Asia Minor, an island or group of islands: or he may work his way homewards through a number of Museums in Italy, Austria and Germany: or attend Mau's summer-course of lectures at Pompeii and afterwards spend some months in Rome and the cooler Etruscan cities. In the latter case he will do well to attach himself to the British School at Rome (Palazzo Odescalchi), where a library is being formed and advice and information may be obtained.

For the *second year* it is impossible to formulate a definite scheme. It should be devoted almost entirely to special work in a narrower field.

The course here suggested must be modified in different ways to suit each case. There will always be men who, like most of the French students, are already specialists in some branch of classical learning and only seek fresh material for research. On the other hand there will be others who wish to see something of all sides of ancient life, to visit sites and battle fields, illuminating and colouring their past reading and fitting themselves for general classical teaching: but have no time for minute archaeological studies.

It is evident that in each year the methods and matter of the teaching at the School must be adapted to the requirements of the students. Students from English universities will never have the love of formal lectures which distinguishes those from America, and where the numbers are small it will often be better to teach, as Dr. Wolters has been in the habit of doing, by means of informal visits to sites and Museums.

# RULES AND REGULATIONS

OF THE

# BRITISH SCHOOL AT ATHENS.

## OBJECTS OF THE SCHOOL.

I. The first aim of the School shall be to promote the study of Greek archæology in all its departments. Among these shall be (i) the study of Greek art and architecture in their remains of every period; (ii) the study of inscriptions; (iii) the exploration of ancient sites; (iv) the tracing of ancient roads and routes of traffic.

II. Besides being a School of Archæology, it shall be also, in the most comprehensive sense, a School of Classical Studies. Every period of the Greek language and literature, from the earliest age to the present day, shall be considered as coming within the province of the School.

III. The School shall also be a centre at which information can be obtained and books consulted by British travellers in Greece.

IV. For these purposes a Library shall be formed, and maintained, of archæological and other suitable books, including maps, plans, and photographs.

## THE SUBSCRIBERS.

V. The following shall be considered as Subscribers to the School:—

(1) Donors of £10 and upwards.
(2) Annual Subscribers of £1 and upwards during the period of their subscription.
(3) Corporate bodies subscribing £50 at one time or £5 annually.

VI. A corporate body subscribing not less than £50 a year, for a term of years, shall, during that term, have the right to nominate a member of the Managing Committee.

VII. A meeting of Subscribers shall be held in October of each year, at which each Subscriber shall have one vote. A subscribing corporate body may send a representative. At this meeting a report from the Managing Committee shall be presented, including a financial statement and selections from the reports of the Director and Students for the season. At this meeting shall also be annually elected or re-elected the Treasurer and the Secretary of the School, two Auditors, and four members of the Managing Committee, in place of those retiring, under Rule XIII. (3).

VIII. Special meetings of Subscribers may, if necessary, be summoned by the Managing Committee.

IX. Subscribers shall be entitled to receive a copy of any reports that may be published by the School, to use the Library, and to attend the public meetings of the School, whenever they may be in Athens.

## THE TRUSTEES.

X. The property of the School shall be vested in three Trustees, who shall be appointed for life, except as hereinafter provided. Vacancies in the number of Trustees shall be filled up at the annual meeting of the Subscribers.

XI. In the event of a Trustee becoming unfit, or incapable of acting, he may be removed from his office by a majority of three-fourths of those present at a special meeting of Subscribers summoned by the Managing Committee for that purpose, and another Trustee shall by the same majority be appointed in his place.

XII. In the event of the death or resignation of a Trustee occurring between two annual meetings, the Managing Committee shall have the power of nominating another Trustee to act in his place until the next annual meeting.

## THE MANAGING COMMITTEE.

XIII. The Managing Committee shall consist of the following:—

(1) The Trustees of the School.
(2) The Treasurer and Secretary of the School.
(3) Twelve Members elected by the Subscribers at the annual meetings. Of these, four shall retire in each year, at first by lot, afterwards by rotation. Members retiring are eligible for re-election.
(4) The members nominated by corporate bodies under Rule VI.

XIV. The Committee shall have control of all the affairs of the School, and shall decide any dispute that may arise between the Director and Students. They shall have power to deprive any Student of the use of the school-building.

XV. The Committee shall meet as a rule once in every two months; but the Secretary or Treasurer may, with the approval of two members of the Committee, summon a special meeting when necessary.

XVI. Due notice of every meeting shall be sent to each member of the Committee by a summons signed by the Secretary. Three members of the Committee shall be a quorum.

XVII. In case of an equality of votes, the Chairman shall have a second or casting vote.

XVIII. In the event of vacancies occurring among the officers or on the Committee between the annual elections, they may be provisionally filled up by the Committee until the next annual meeting.

## STUDENTS AND ASSOCIATES.

XIX. The Students shall consist of the following :—

(1) Holders of travelling fellowships, studentships, or scholarships at any University of the United Kingdom or of the British Colonies.

(2) Travelling Students sent out by the Royal Academy, the Royal Institute of British Architects, or other similar bodies.

(3) Other persons who shall satisfy the Managing Committee that they are duly qualified to be admitted to the privileges of the School.

No person shall be admitted as a Student who does not intend to reside at least three months in Greek lands.

XX. Students attached to the School will be expected to pursue some definite course of study or research in a department of Hellenic studies, and to write in each season a report upon their work. Such reports shall be submitted to the Director, shall by him be forwarded to the Managing Committee, and may be published by the Committee if and as they think proper.

XXI. Intending Students are required to apply to the Secretary. They will be regarded as Students from the date of their admission by the Committee to the 31st day of October next following; but any Student admitted between July 1st and October 31st in any year shall continue to be regarded as a Student until October 31st of the following year.

XXII. The Managing Committee may elect as Associates of the School any persons actively engaged in study or exploration in Greek lands; and may also elect as honorary members such persons as they may from time to time think desirable.

XXIII. Students, Associates, and honorary members, shall have a right to use the Library of the School, and to attend all lectures given in connexion with the School, free of charge.

XXIV. Students shall be expected to reside in the Hostel provided for them, except with the sanction of the Managing Committee. Priority of claim to accommodation in the Hostel shall be determined by the Committee

## THE DIRECTOR.

XXV. The Director shall be appointed by the Managing Committee, on terms which shall be agreed upon at the time, for a period of not more than three years. He shall be eligible for re-election.

XXVI. He shall have possession of the school-building as a dwelling-house; but Students of the School shall have a right to the use of the Library at all reasonable times.

XXVII. It shall be his duty (1) to guide and assist the studies of Students and Associates of the School, affording them all the aid in his power, and also to see that reports are duly furnished by Students, in accordance with Rule XX., and placed in the hands of the Secretary before the end of June; (2) to act as Editor of the School Annual.

XXVIII. (*a*) Public Meetings of the School shall be held in Athens during the season, at which the Director and Students of the School shall read papers on some subject of study or research, and make reports on the work undertaken by the School. (*b*) The Director shall deliver lectures to Students of the School. At least six of such meetings and lectures shall be held in the course of each session.

XXIX. He may at his discretion allow persons, not Students of the School, to use the Library and attend his lectures.

XXX. He shall be resident at Athens from the beginning of November in each year to the end of the following June, but shall be at liberty to absent himself for short periods for purposes of exploration or research.

XXXI. At the end of each season he shall report to the Managing Committee—(i) on the studies pursued during the season by himself and by each Student; (ii) on the state of the School-premises and the repairs needed for them; (iii) on the state of the Library and the purchases of books, &c., which he may think desirable; and (iv) on any other matter affecting the interests of the School.

XXXII. In case of misconduct the Director may be removed from his office by the Managing Committee by a majority of three-fourths of those present at a meeting specially summoned for the purpose. Of such meeting at least a fortnight's notice shall be given.

### RULES FOR THE MACMILLAN HOSTEL.

XXXIII. The Hostel shall be managed by the Students for the time being, subject to the control of the Director.

XXXIV. The Director shall have power to exclude a Student from the Hostel in case of misconduct; but such exclusion must be immediately reported to the Managing Committee.

XXXV. The Students shall, until further notice, pay a fixed charge of 20 drachmas (paper) a week for their rooms, this payment to include fire, lighting, and the necessary servants' wages.

XXXVI. Associates of the School, members of the Committee, and ex-directors, may be admitted to residence in the Hostel. Other persons, if seriously engaged in study or research, may be admitted by the Director at his discretion. But no person shall reside in the Hostel under this rule to the exclusion of any Student desiring admission.

XXXVII. The weekly charge for residents other than Students shall be 30 drachmas (paper) until further notice.

XXXVIII. The Director shall draw up further rules for the internal management of the Hostel; such rules to be subject to the approval of the Managing Committee.

### RULES FOR THE LIBRARY.

XXXIX. The Director shall have power to make rules for the management of the Library, its use by Students, and the like; such rules to be subject to the approval of the Managing Committee.

### PUBLICATION.

XL. No publication whatever, respecting the work of the School, shall be made without the previous approval of the Committee.

### THE FINANCES.

XLI. All money received on behalf of the School beyond what is required for current expenses shall be invested in the names and at the discretion of the Trustees.

XLII. The banking account of the School shall be placed in the names of the Treasurer and Secretary, who shall sign cheques jointly.

XLIII. The first claim on the revenue of the School shall be the maintenance and repair of the School-building, and the payment of rates, taxes, and insurance.

XLIV. The second claim shall be the salary of the Director, as arranged between him and the Managing Committee.

XLV. In case of there being a surplus, a sum shall be annually devoted to the maintenance of the Library of the School and to the publication of a report; and a fund shall be formed from which grants may be made for travelling and excavation.

*Revised*, 1899.

### MANAGING COMMITTEE, 1902—1903.

Edwin Freshfield, Esq., LL.D.
Sir Richard Jebb, Litt.D., D.C.L., LL.D., M.P. } *Trustees.*
George A. Macmillan, Esq., D. Litt.
D. B. Monro, Esq., M.A., Provost of Oriel. Appointed by the University of Oxford.
Professor William Ridgeway, M.A. Appointed by the University of Cambridge.
Sidney Colvin, Esq., M.A. Appointed by the Hellenic Society.
Arthur J. Evans, Esq., LL.D., F.R.S.
Professor Ernest Gardner, M.A.
Professor Percy Gardner, Litt.D.
Miss Jane E. Harrison, D.Litt., LL.D.
D. G. Hogarth, Esq., M.A.
R. J. G. Mayor, Esq., M.A.
J. Linton Myres, Esq., M.A. } Appointed by the Subscribers.
Professor H. F. Pelham, M.A., President of Trinity College, Oxford.
Cecil Harcourt Smith, Esq., LL.D.
Professor J. S. Reid, Litt.D.
Professor Charles Waldstein, Litt.D.
Walter Leaf, Esq., Litt.D., *Hon. Treasurer*, 6, Sussex Place, Regent's Park, N.W.
William Loring, Esq., M.A., *Hon. Secretary*, 2, Hare Court, Temple, E.C.

### DIRECTOR, 1902—1903.

R. Carr Bosanquet, Esq., M.A., Trinity College, Cambridge.

*Assistant-Director.*—M. N. Tod, Esq., M.A., St. John's College, Oxford.

# British School at Athens.

THIS School (founded in 1886) gives to British Students of Greek Archaeology and Art the opportunity of pursuing their researches in Greece itself, with command of the means which the recent great advances of the science have rendered indispensable.

Athens is now an archaeological centre of the first rank. The architecture of Greece can nowhere else be studied to such advantage; and the concentration in the Athenian museums of numerous and most important discoveries which have taken place on Greek soil in the last few years has made a personal knowledge of those museums in the highest degree desirable for Hellenic scholars.

The student requires two auxiliaries when working in Athens. Firstly, the command of an adequate library; and secondly, the advice of a trained archaeologist, residing on the spot, and following the rapid advances of the science, due partly to new discovery and partly to the rearrangement of old materials.

These advantages are now provided for French, German, Austrian, American, and British archaeologists, through the Schools which their nationalities have established. It is also by means of these Schools that many excavations on Greek soil have been carried out; and those conducted in Cyprus, in the Peloponnese, in Melos and in Crete by the British School during the past sixteen Sessions are an encouraging proof of the work that may be done in the future if the School be adequately supported.

Students are admitted free of charge. The principal conditions imposed are that they shall pursue some definite course of Hellenic study or research, residing for the purpose not less than three months in Greek lands, and that they shall at the end of the Session write a report of the work which they have done. Applications from intending students should be made to the Hon. Sec., WILLIAM LORING, Esq., 2, Hare Court, Temple, E.C. Mr. LORING will also be happy to supply any further information.

Donations or annual subscriptions to the School are greatly needed, and will be gladly received and acknowledged by the Hon. Treasurer, WALTER LEAF, Esq., 6, Sussex Place, Regent's Park, N.W.

*May* 1903.

# INDEX

# INDEX.

ADRASTEIA, 193, 195
. . . *αίθους*, 195
Akaiuasha, (*'ΑχαιFοί*), 180
Alabaster bowl, 296
Alashiya, possibly connotes Cyprus, 168; raided by *Lukki*, 176
Alphabet of Praesos inscriptions compared with Ionic, 128–131, 133 *foll.*
*'Αλφιτόπωλις*, flour exchange, 207
Altar at Knossos, 30
Altar base in stone, 94
Altar-hill at Praesos, 254
Altars (?) in beehive tomb, 240
Ȧmenḥetep III., cartouche of, on carnelian duck, 39; on ape from Mycenae, 188; on vase of faience from Mycenae, 188
*'Αμπελουργός*, 205
*'Αμφορεαφόρος*, 209
Anait = goddess Anahit, 134, 142; not necessarily Semitic, 142
Antefixes, terracotta, from Praesos temple (?), 257
Ape of faience with cartouche, from Mycenae, 188
Aphrodite and Eros, terracotta, 281
*'Αποστασίου*, action at law, 200; perhaps sometimes collusive, 202
*'Αποφυγών* in sense of acquittal, 198 *foll.*
Aptera, coins of, from Praesos, 269
Archer on terracotta plaque, 281
Armour, miniature, in bronze, 256, 258
Arrowheads, 259
*'Αρτοπώλης*, 206
*'Ασκοφόρος*, 209
*'Αστροπελέκια* in Hellenistic times, 265
Ȧsy, perhaps part of Cyprus, 167
Axe (double-), sign on masonry, 65, 66; between horns, at Knossos, 100; at Palaikastro, *ibid.*; of steatite, 101; of plated bronze, *ibid.*; as pottery mark, 106; on clay sealing, 107
Axes, bronze miniature, 70

BABYLONIAN influence, on a seal, 77
*barxe*-inscription, 131 *foll.*
Bathroom at Knossos, 41, 52, 53, 95; at Palaikastro, 312
Beads of clay, 251
Beam construction at Knossos, 41, 63
Beehive tomb at Palaikastro, 303; possibly constructed by settlers, 305
Bird, wall decoration in coloured stucco relief at Knossos, 51; in decoration of larnax, 300
Black ware with head in relief, 269
Bone comb (?), 304; discs from Praesos, 259; enclosures, pre-Mycenaean, 291; strip carved with pattern, 313
Bréal, opinion on *nomos* inscription, 143
Bronze objects, 69, 71; fibula, 244, 259; miniature armour, 256, 258; vase, 269; arrowhead, *ibid.*; couchant lion, 270; miniature axe, 291; knife, 308; ring and dove, 313; chisel, 316
Bronze age pottery from Skalais, 235
Bucchero jug, 244
Bull galloping and fish, seal impression at Knossos, 60; foot of, in *gesso*, 66; head of, in porcelain, 69; painted in stucco, 70; couchant, seized by hunter, on Praesos gem, 252
Bulls and lions relief, from Cyzicus, 192; from Pergamon, 193
Burials, three superimposed, at Praesos, 249
*Βυρσοδέψαι*, 203

CANDLESTICK, terracotta, from Knossos, 90–93; from Egyptian tomb, 93
Cave of Skalais, 235

Celt, greenstone, found at Praesos, 264
Chair for carrying, perhaps of divinity or priest at Knossos, 32
Χαλχεύς, 203
Chest of stucco (?) at Knossos, 24
Chisel, bronze at Knossos, 60
Chryselephantine statuettes, 72
Χρυσοχόοι, 203
Cnidian frieze at Delphi, 191
Coins, of Aptera, from Praesos, 269 ; of Cyrene, *ibid.* 259 ; of Itanos found in beehive tomb, 240 ; of Phalasarna, from Praesos, 259 ; of Philip in Praesos tomb, 245
Construction of words in Praesos inscriptions, 147 *foll.*
Corinthian aryballos from beehive tomb, 243 ; four handled bowl, 248
Corn, found in jugs at Palaikastro, 77
Cornelian gems, 244, 270
Cretan importations in Egypt, 123–4 ; names, 136 *foll.*
Crystal objects, 70, 71, 270
Cuirasses, votive miniature, 258
Cult of Dove Goddess at Knossos, 24, 29 ; at Mycenae, 30 ; not Phoenician, 30 ; of a pair of divinities at Knossos, 102
Cup with lining of cells, 285
Cylinder, engraved, 302
Cylindrical base, statuettes on, at Knossos, 98 ; at Gournià, 105 ; at Prinià, *ibid.*
Cyprus in Egyptian inscriptions, 167
Cyrene, coin of, found at Praesos, 259
Cyzicus, sculptures from, 190 *foll.*

Δακτυλιογλύφοι, 203, 218, 222
*Danaáu* or *Danauna* (see *Danuna*), 182, 183
Danuna, 176 ; Δαναοί (?) 184
*Dardenui* (Dardanians ?), 179
Dancer (?), stucco painting at Knossos, 55, 58
Dating of Praesos inscriptions, 128
Decimal system in Crete, 38
Dedications of a φιάλη by freedmen, 198 *foll.*
Διάκονος, 210
Dionysiades, islands on Cretan coast, 233
Diorite bowl, fragment of, 122
Distaff as sign on masonry, 65, 66
Divinities, 76
Dolphins, 77
Double-axe at Knossos, 22 ; cult at Knossos, 30, sign on blocks at Knossos, 55 ; reduplicated, at Mycenae and Knossos, 101 ; with cuspated sides, 102 ; on pottery, 103 ; with horns, on larnax, 299 ; bronze, 316
Dove on head of figure, 98–100 ; held by male figure, 100 ; modelled over cup, 294 ; bronze, 313
Dove-Goddess at Knossos, 24
Dragmos, 288
Drainage system at Knossos, 62, 81 *foll.*
Drain pipes at Knossos, 13, 14 ; in Leukas, 14
Duck, gold, at Knossos, 38, 39 ; cornelian, 39
Dungeons at Knossos, 4

E for ει, very late example, or accidental use, 226
Egypt, early relations with Greece, 157, 169
Egyptian importation in Crete, 121, 123
ει for ε before a vowel, 227
Ἑλών, in reference to lost suit, 201
Ἔμποροι, 205
Eros with Aphrodite, terracotta, 281
Eteocretan inscriptions, 232, 255
Εὐπείθη, a female name, 220

FEATHER headdress worn by 'Peoples of the Sea,' as by Lycians at Salamis, 185
Fish on decoration of larnax, 300 ; on vase, 308
Flying fish, 77
Fork sign on masonry, 64

GEM, represented on wrist of statuette, 98
Geometric pottery at Knossos, 8 ; from Skalais, 235–6 ; from beehive tomb, Praesos, 242–3, 245 ; from other tombs at Praesos, 249, 256 ; from Adhromyloi, 249 ; from Kastri, 289
Gesso duro bas-reliefs, 42 ; bull's foot, painted, 66
Γεωργοί, 'farm-hands,' 205
Glass beads, 244, 270 ; eyes of bull, 69 ; intaglio, 270 ; vase from Praesos, 259 ; (volcanic), see Liparite
Gold receptacle for perfumes, at Knossos, 24 ; ornaments, *ibid.*, 38, 39, 244, 247 ; fish, 80, 81 ; ivy leaf, 248 ; leaf, 290 ; objects, 69 ; ring, from beehive tomb, 243 ; from Praesos tomb, 247
Γραμματεύς, 210
Grammion, 288
Greece, early relations with Egypt, 157
Gryphon, 300
Gypsum wall-revetment at Palaikastro, 306

HAGIOS Constantinos, megalithic house at, 236 *foll.*
Hand-made pottery from Palaikastro, 290

Ḥa-nebu, 158 *foll.*
Hare, modelled on handle of vase-lid, 235, 236
*Heleia*, perhaps = Palaikastro, 288
Hellenistic houses at Praesos, 251, 259
Helmet, Mycenaean, 77
Helmets, votive miniature, 258
Heracles, relief from Cyzicus, 190; in Cyzicus legends and cults, 191
Herdsman, modelled inside cup, 294
Hone, 308
'Horns of Consecration' at Knossos, 30; on a gem from Idaean cave, 32, 77, 96, 100; with double-axe, on larnax, 299; in stucco, 314
Hunter seizing bull, on Praesos gem, 252

IDAEAN Cave, gem from, 32
Imbrex tiles inscribed, 289
Inscribed clay tablets, 94; deposits of, found at Knossos, 38
Inscription painted on Mycenaean vase, 66; on clay labels, 68; incised on pottery, 106; written in ink in cups, 107–9; prae-Hellenic of Praesos, 125 *foll.*; probably Indo-European, 142; referring to Praesos, 137; incised on potsherd, 285
Ionic capitals from Cyzicus, 195 *foll.*
Iron swords, 245, 249, 251
Ἰσοτελεῖς, 219
Itanos, 288; coin of, found in beehive tomb, 240; coins of, from Praesos, 269
Ivory disc with engravings from Palaikastro, 296; draught-men, at Knossos, 14; fragment painted and incised, 244; knot, 110; objects, 69, 70; statuettes, 67, 72: wing, 72

JASPER pommel, 70

KALAKISHA, (Cilicians), 178
Kamáres pottery, 1, 6, 24, 25, 70, 106, 118, 294, 306, 308, 311, 312, 316; compared with Keftiu metal vases, 173; from Skalais cave, 235; from Petras, 284 *foll.*; dating, *ibid*
Κάπηλος, -ίς, 206, 209
Kataonians (?) among allies of Kheta, 179
Κατωμαγγάνα, press bed, 266
Keftiu (the country), 158 *foll.*; geographical position, 163; export from, of Mycenaean objects, 174; not merely Crete, 166, 175; probably included Cyprus, 169
Keftiu (the people), Mycenaeans, 165; not Phoenician, 163, 175; costume non-Semitic, 164: sometimes wrongly represented as Semitic in Egyptian art, 175
Κιθαρῳδός, 208
*Kleinmeister* kylix from Praesos, 256
Κλινοποιός, 204; or Κλινοπηγός?, 218
Knobs as pottery decoration, 10–11
Knossos, Palace Site, excavations 1902, p. 1 *foll.*: stratification of remains, 23, 46
ΚΝΩΣ(ιων) inscribed on imbrex tile, 289
Κοιμητήριον (?) at Praesos, 260
Κοινὸν ἐρανιστῶν, 218
Kore Soteira, statue of, from Cyzicus, 194
Κουρεύς, 209
Κυφαρισσιφα in a Cretan inscription, 131

LABELS in clay, 68
Labrys connected with Labyrinthos, 103
Labyrinth identified, 103; on wall-painting, 103–4; Egyptian origin in art, 104
Lamp of schist from Palaikastro, 291, 296; of steatite, 69
Lapis Lacedaemonius used at Knossos, 78
Larnakes, at H. Constantinos, 237, 245, 247
Larnax burials in Crete, 297, 305; form reproduces wooden chest, 299; decorations probably imitate Egyptian, 299
Latrine at Knossos, 62, 80, 86, 87
Lead rivet, 270
Leukas, drain pipes found in, 14
Leuke, suggested identification of, 288
Λιβανωτοπώλης, -ις, 206, 208
Libyan expedition (?) recorded in porcelain plaques at Knossos, 22
Light-shaft at Palaikastro, 312
Lily, hand holding, 77; on Knossian vases and wall-painting, 92
Lion, bronze, 270; terracotta, 276
Lion-headed daemons, 76
Lions with divinities, 76; votive, 257
Lions and bulls, reliefs from Cyzicus, 192; from Pergamon, 193
Liparite bowl at Knossos, 122; intaglio, *ibid.*, 123
Loin-guards, votive miniature, 258
Loom weights, 24, 94, 285
Lukki, Lycians, not inhabitants of *Lakî*, 176, 178
Λυκόφρων Λυκίσκου, 215

MAGAZINES with *pithoi*, 117
Μάγειροι, 208
Μαλαθούνια, squares of grass fibre used in olive-pressing, 265

Marble, imitation of, in painting, 110 ; statuette from Praesos, 259
Marine picture at Knossos, 58 ; compared with that of Phylakopi, *ibid.*
*Masa*, (Mysians ?) 179
Megalithic house at H. Constantinos, 236 *foll.*
Milking scene, 77
Minoan pottery, 1, 26, 28
Misgolas, 212–3
Μισθωτός, 210
Monsters, 77
Mould of schist, 101 ; of stone, 299
Mycenaean amphora on Egyptian painting, 174 ; costumes and wares on Egyptian monuments, 158, 170, 176 ; gem from Praesos, 252 ; lamp, 285 ; larnakes at H. Constantinos, 237 ; pottery, 8, 42, 66, 70, 76, 285, 312, 313, 316 ; settlement at Praesos, 251 ; tomb, *ibid.*, 254 ; tomb at Palaikastro, 290

Νευροράφος, 204
*Nomos*-inscription, 125 *foll.*

OBSIDIAN at Knossos, 123 ; at Abydos, *ibid.* flakes, 285, 306 ; fragments, 270 ; lump, 308 316 ; razors, 251, 291
οι for ωι, intentional archaism (?), 226
Oil, manufacture and storage of, at Knossos, 8 ; vat, *ibid.*
Olive press, 10, 264, 306 (?)
Ὀνηλάται, 209, 223
Ὀρεωκόμοι, 209
Oroandians (?) among allies of Kheta, 179
Ὀσπριοπώλης, 206
Ox, head of, in clay, 313
Oxen, miniature, modelled inside cup, 294 ; terracotta, 278

Παιδίον, unusual use of, 227
Painting on wall, 66, 74, 75, 80, 315
Palaikastro, excavations at, 286 ; description of the site, 287 ; possibly *Heleia*, 288 ; unimportant in Hellenic times, 289 ; methods of burial at, 305
Palettes (?) of slate, 244, 251
Palm leaves, earliest material for Cretan writing, 76
. . πανσωνος, inscribed on pithos, 136, 269
Peas, 316
Pebble floor, 96
'Peoples of the Sea,' 175 *foll.* ; partly Mycenaean, 176 ; non-Semitic features, dress, and weapons, 185 ; relations to Mycenaean, 187-8
Percentages, tablets relating to, at Knossos, 38
Petras, excavations at, 282
Phalasarna, coin of, found at Praesos, 259
Φανυμένης, 220
Φιάλαι ἐξελευθερικαί, 199, 230 ; probably represent registration fees, 201
Phoenician trade between Egypt and Mediterranean, 174
Φορτηγοί, 209
Phylakopi-pottery, contemporary with Knossian, 106
Pictograph signs, 65
*Pidasa*, (Pisidians), 178
Pillar-hall at Knossos, 6
Pillar-Shrine at Knossos, 28–29
Pithoi, 10, 48, 61, 306, 316 ; with incised patterns, 239, 284
Pithos inscribed, 136
Plaques of terracotta with reliefs, 280. *foll.*
Platform built in Knossos room, 62
Ποικιλτής, 226
Porcelain beads, 244 ; jug, *ibid.* ; objects, 69 ; plaques at Knossos, in form of houses, &c., 14–16 ; probably decorated a larnax, 20 ; compared to Homeric shield of Achilles, 22 ; vase at Knossos, 24
Portico, newly discovered at Knossos, 3, 4, 42
Pottery, stratification of, at Knossos, 118 ; finely modelled, in imitation of metal, 118 ; primitive and Bronze Age, from Skalais, 235
Praesos, coins of, from Praesos, 269 ; excavations, 1901, 231 *foll.* ; in mediaeval times, 231 ; inscriptions found at, 125 *foll.* ; the site, 233
Pre-Mycenaean interments, 292
Proto-Corinthian aryballos, found with Geometric vases, 243
Προΰνεικοι, 207
Pseudamphorae, 303, 304, 306
*Purusatha* or *Pulesatha*, 182 ; probably Philistines from Crete, *ibid.*

REINACH (S.), opinion on *nomos*-inscription, 143
Resin, 270
Rhea, cult of at Knossos, 102
Royal signet, impressions of, at Knossos, 38
Runnel, constructed in stone, 111

Σ . . χιστής, 213
Sacred horns, 30, 32, 77, 96, 100 ; with double-axe, on larnax, 299 ; in stucco, 314
Sauroter, votive, 258

Sayce, opinion on *nomos*-inscription, 143
Scarabaeoid markings on cornelian bead from Palaikastro, 302, 315
Seal impressions found at Knossos, 38, 60, 107; in clay, 67, 68, 75, 76, 94
Seats, built at Knossos, 49, 50
Semi-detached villas at Knossos, 16
Separator used in olive pressing, 268
Σησαμοπώλης, -ις, 206
*Shakarusha* or *Shakalesha*, 180; (Sagalassians), 181
*Shardina*, 180; (probably Sardians of Lydia), 181
Shields, 77; votive miniature, 258
Shrine, 77; in Palace, 95 *foll.*; portable (?), 70
Shutters to windows at Praesos, 262
Σιδηροπώλης, 206, 208
Silver pin, 244; ring, 304; vessel, 247
*Sirdana*, 176
Skalais cave, 235
Σκυλοδέψοι, 203
Σκυτοτόμοι, 204
Slate palettes (?), 244, 251
Σμωρ, on terracotta discs, 136
Sneferu, Egyptian king, 122
Σφηττοῖ, locative, 213
Spindle as sign on masonry, 65
Spools for winding thread, in clay, 91
Spout projecting from wall at Knossos, 9
Staircase, private, at Knossos, 59; of wood, *ibid.*, 75
Star, mark on blocks at Knossos, 6
Statue of goddess from Cyzicus, 193
Steatite bowl, 285; gem, 244; lamps and vases, 296, 315, 316; pyxis, 89; seal, 297; sherds, 306
Stele from Cyzicus, 195
Stirrup vases, 4, 46.
Stone bowl, 308; implements, 314, 315; vessels from Palaikastro, 290, 226; matrices, *ibid.*, 299; engraved cylinder, 302
Stratification of pottery at Knossos, 118
Stucco party walls, 88
Στυππειοπώλης, -ις, 206
Swords, bronze miniature (?), 70; European on Egyptian painting, 171; inscriptions referring to, at Knossos, 94; two forms of, 94; leaf-shaped already developed before 1400 B.C., 95

T MARK on pottery, 103, 106
Ταλασιουργοί, 204, 208
Ταριχοπώλης, 206
Ταυροκαθαψία, represented at Knossos, 74, 77
*Tchakaray* (*Zakar*), 182, 183
Temenos at Praesos, 255
Temple at Praesos, 257; probably destroyed by Hierapytnians, *ibid.*; of Dictaean Zeus, probably not at *Heleia*, 288
Terracotta antefixes, 257; cornices with reliefs, 288; divinities, 95-98, 105; from Praesos, 271; from Altar Hill, Praesos, 272; idols, 313; inscribed discs, 136; labels, 285; large scale figures, 275; lions, 276 *foll.*; lion masks, 256, 278; loom weights, 285; mourning woman, 280; oxen, 278; Pillar-Shrine with doves, 28, 29; votaries, 96–98; warriors, 280; weights, 316; xoana from Mesavrysis, 271, 278
Thasos, relief from, 191
Thebes, coin of, from Praesos, 269
Thurii coin compared with Knossos seal impression, 60
Timber-casing construction at Knossos, 36
Τίτθαι, 210, 220
Tomb at H. Constantinos, 239; beehive, at Praesos, 240; oven-shaped, at Knossos, 8
Toreadors, female, on fresco, 74
Trade routes between Egypt and Greece, 158, 170, 174
Trades at Athens, 202 *foll.*
'Treasure chamber' at Knossos, 67, 69
Trident mark at Knossos, 6, 10; combined with star, 6
Tripod, handle of, 259; plaster, as table of offerings, 96; (or vase stand?) of pottery, 250
Triton shell, 89, 244; blown by votary, 32; evolution of, in decoration, 305; frequent in early Cretan deposits, 296, 308; miniature, at Knossos, 32.
*Turusha* or *Thuirsha*, 180; (Torêboi ?), 181

*Uashasha*, 182; Axians of Crete (?), 184
Ὑπογραμματεύς, 210
Ὑποδηματοποιοί, 204, 219, 225

VASE burial of Palace Period, Knossos, 89; o faience from Mycenae, with cartouche, 188
Vase support in bronze, 259; in terracotta, 285
Vases in shrine, 96; of earliest period of Palace at Knossos, 87–93; of metal brought by Keftiu to Egypt, 170–4; plain tripod, at Knossos, 14; proto-Mycenaean at Knossos, 95
Vats for oil, at Knossos, 9
Vavélloi, excavations at, 232, *foll.*; terracottas found at, 271, 280, 281

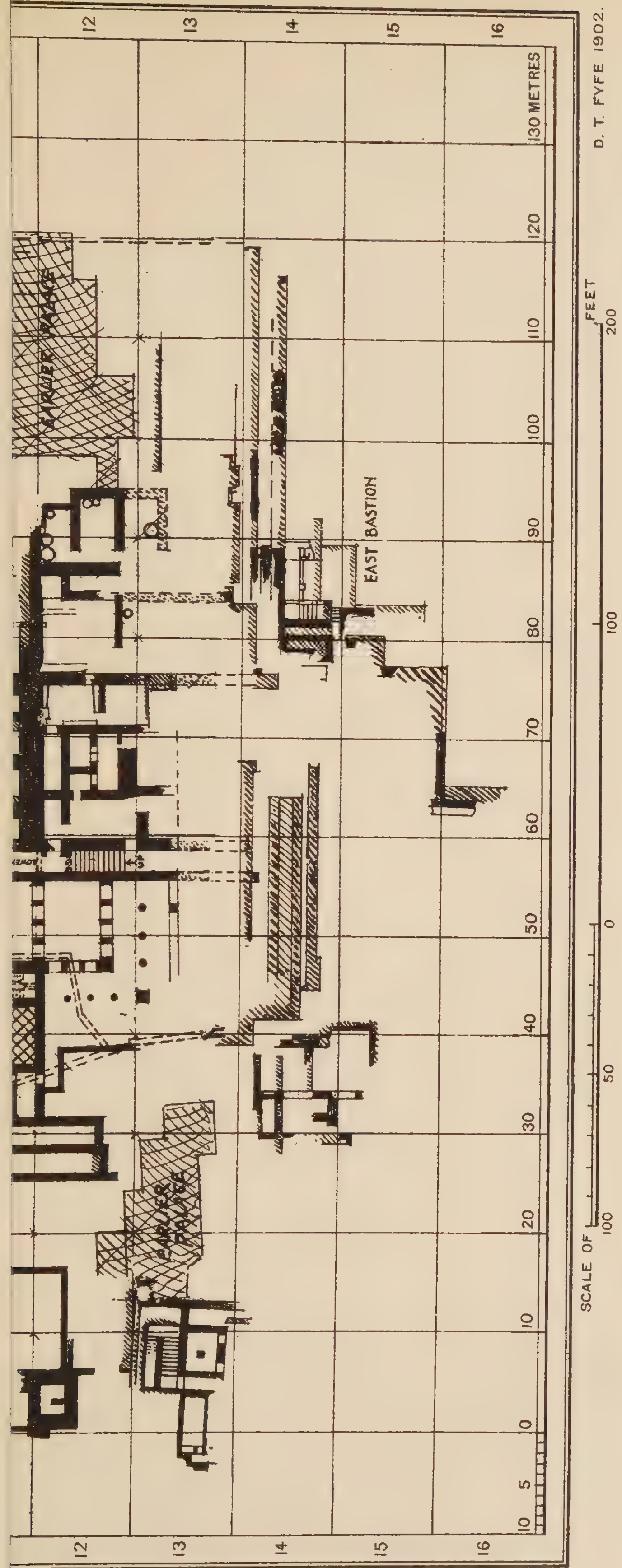
WALL-PAINTINGS at Knossos, 4, 9, 24, 33, 36, 41, 42, 46, 48, 51, 54, 55, 58, 61, 62, 63, 92, 103, 110
Warriors on seal impressions from Knossos, 77
Well at Knossos, 8, 9, 10; at Palaikastro, 31
Wheat, 316
Windows at Knossos, 18, 34, 40, 63, 64
Winepress, rock-cut, at H. Constantinos, 237
Woman holding snakes, design on antefix, 257
Women's quarter of Palace at Knossos, 45 *foll.*
Wooden casket (?), 69

YANTÂNAY = Cyprus, 167

*Ζευγοτρόφος*, 211, 228
Zeus, cult of, at Knossos, 102
*Ζώφιλος*, 212, 214

BIBL.
LONDIN.
UNIV.

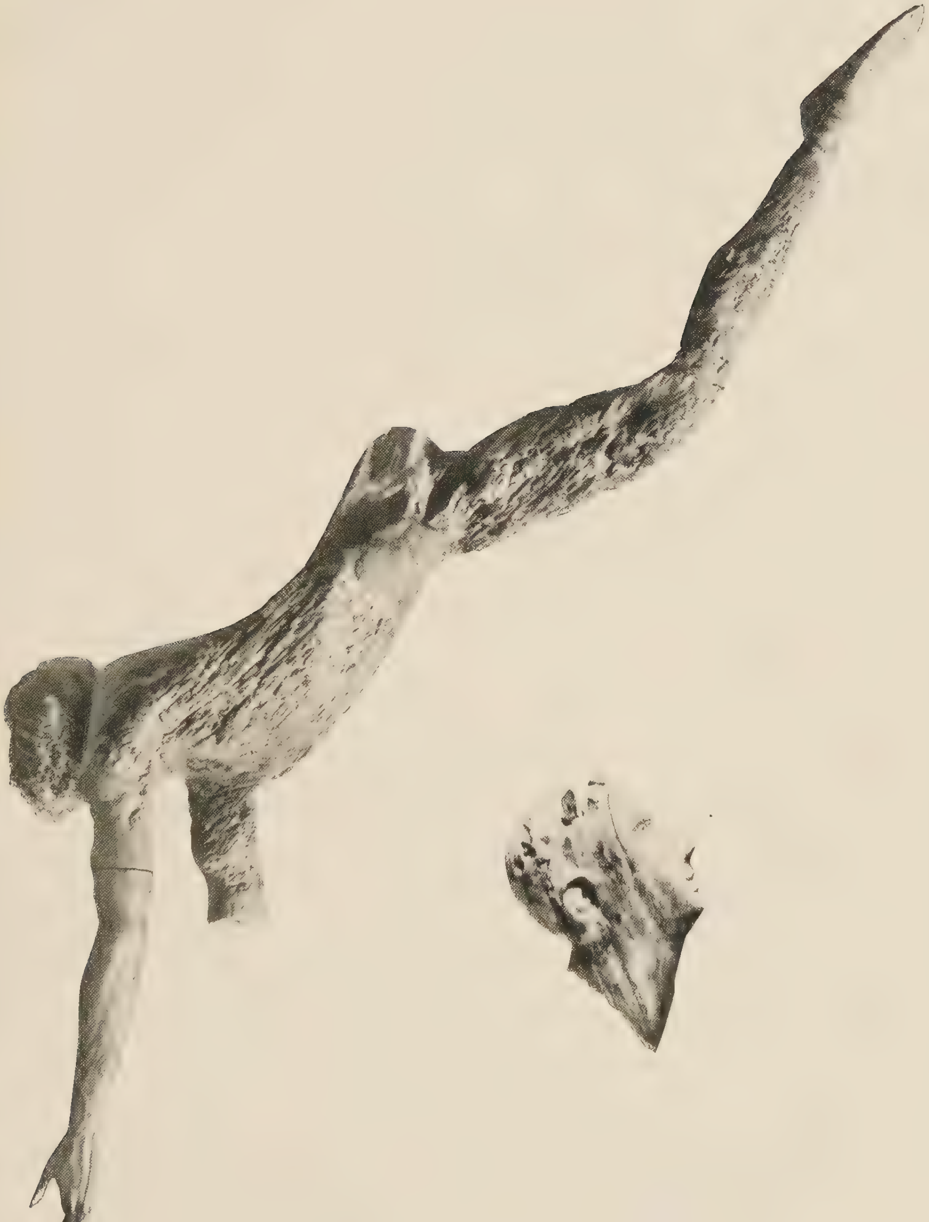
R. CLAY AND SONS, LTD., BREAD ST. HILL, E.C. AND BUNGAY, SUFFOLK.



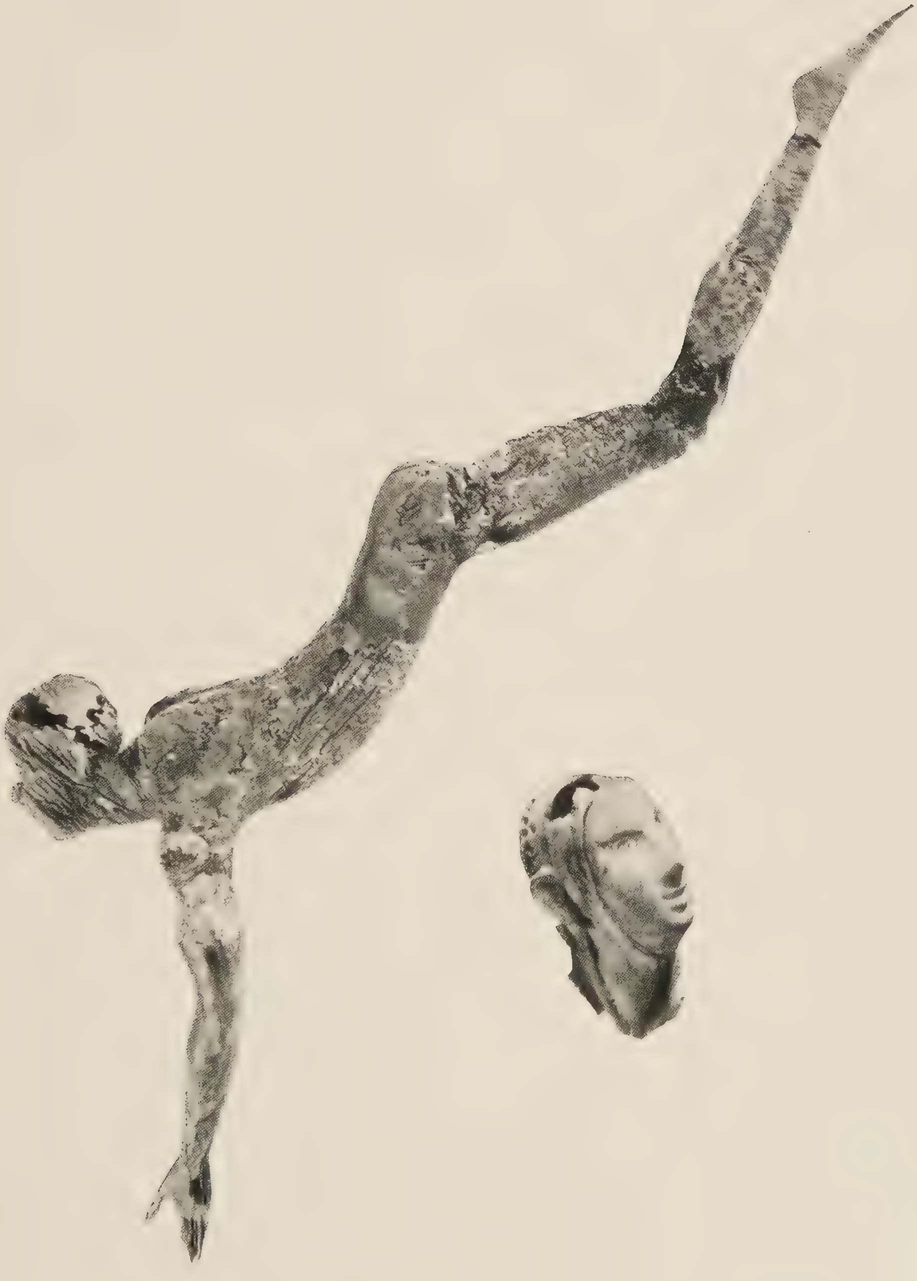
D. T. FYFE 1902.

SKETCH PLAN OF THE PALACE OF KNOSSOS.

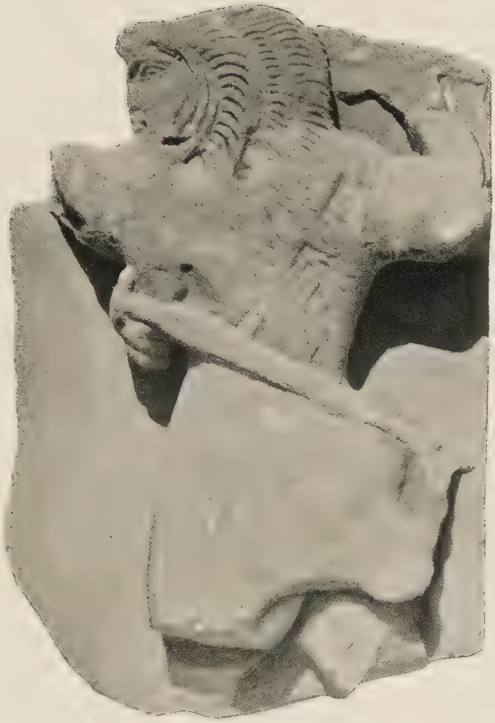
C.F. KELL & SON, PHOTO LITHO. 8, FURNIVAL St HOLBORN, E.C



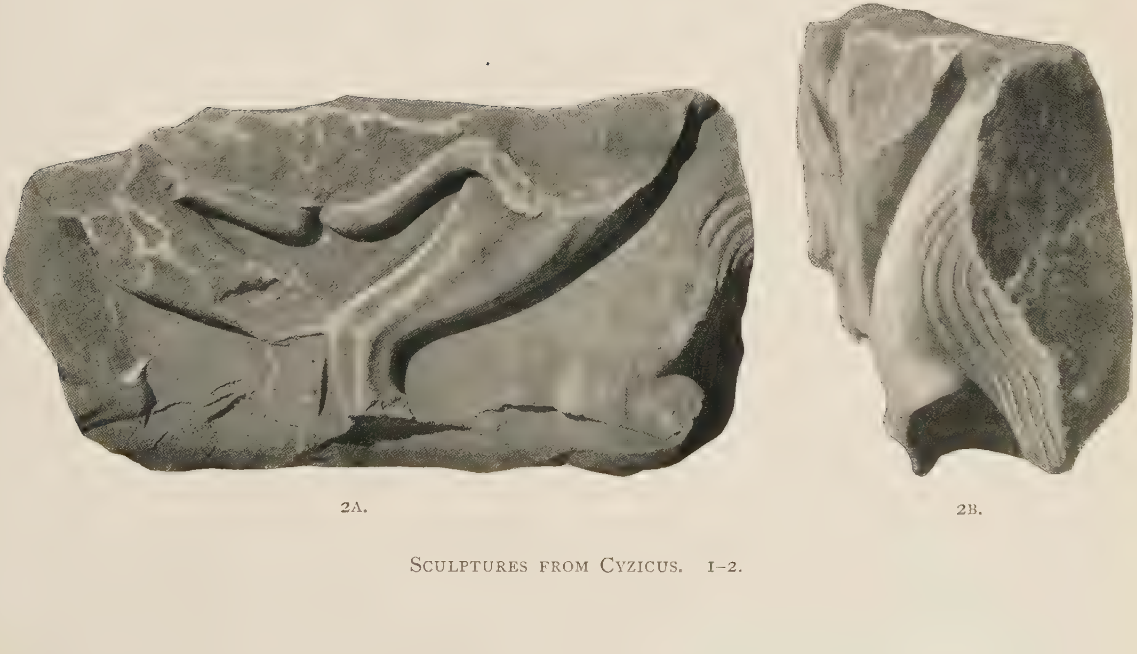
Ivory Figure and Head from Knossos.



Ivory Figure and Head from Knossos.



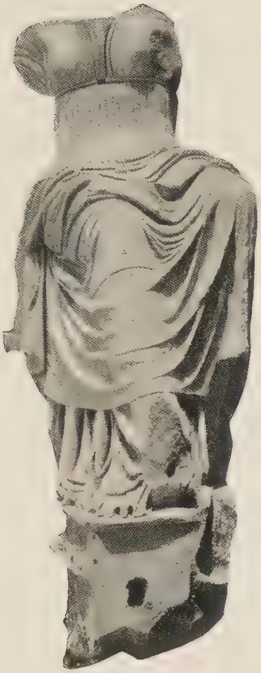
1.



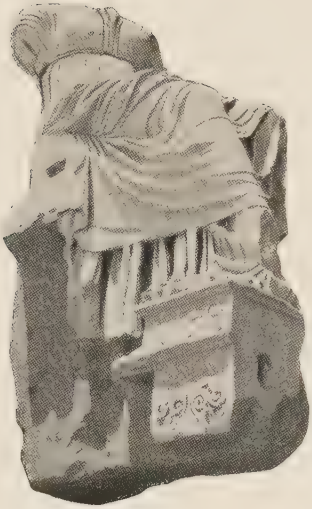
2A.

2B.

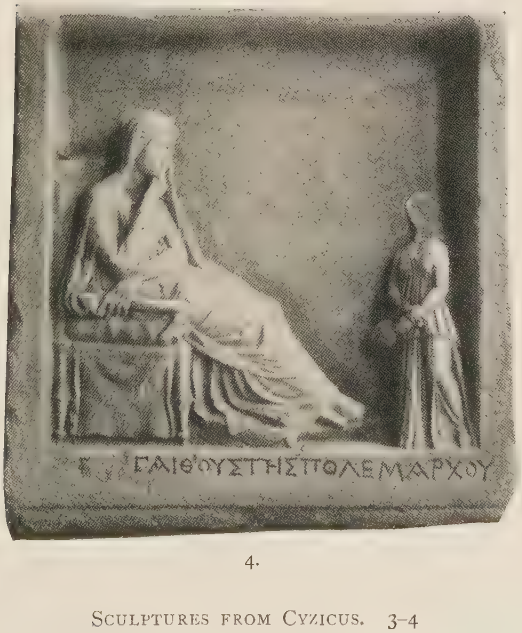
Sculptures from Cyzicus. 1–2.



3A.



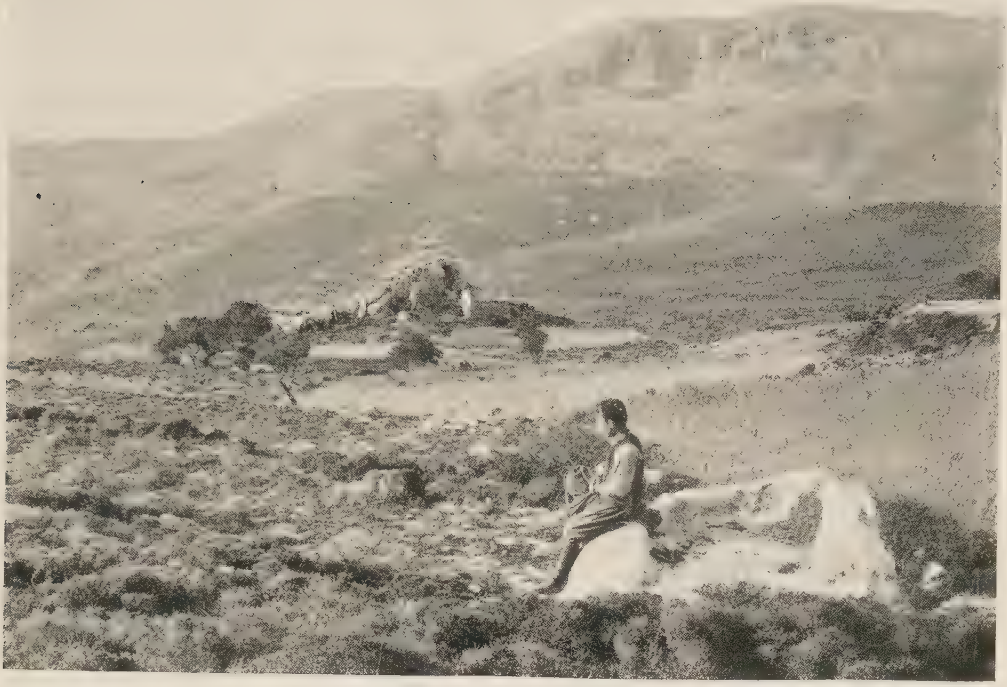
3B.



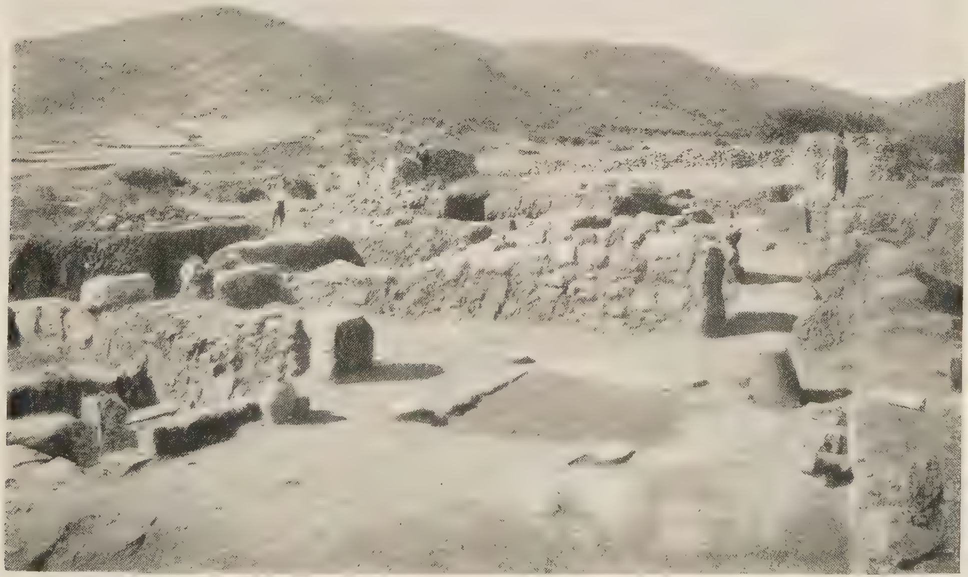
4.

Sculptures from Cyzicus. 3–4

REMAINS OF
VENETIAN VILLAGE
TRIAL PITS
THIRD ACROPOLIS
1200
1300



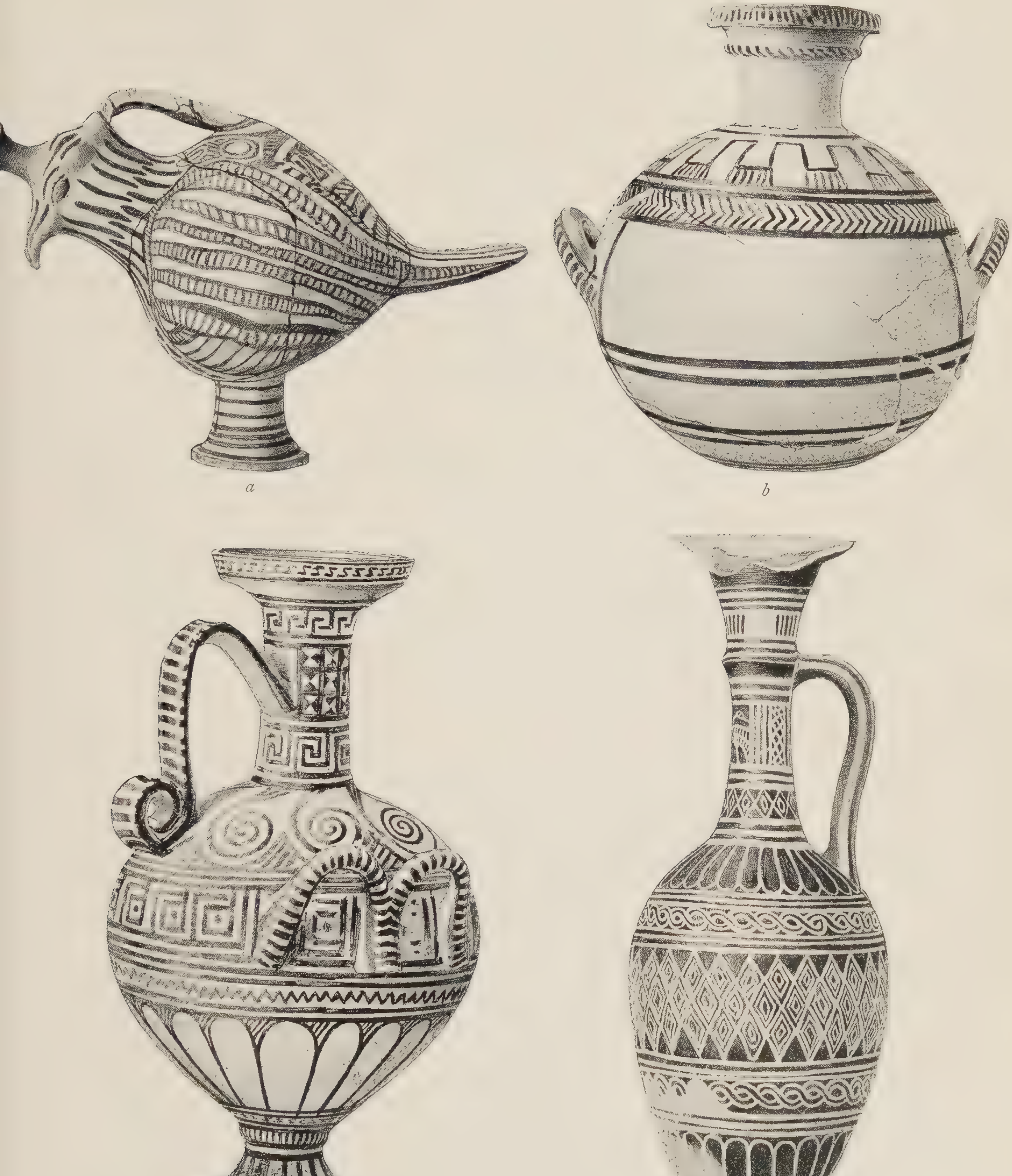
1.



Bath Room Square Impluvium with column bases at angles.

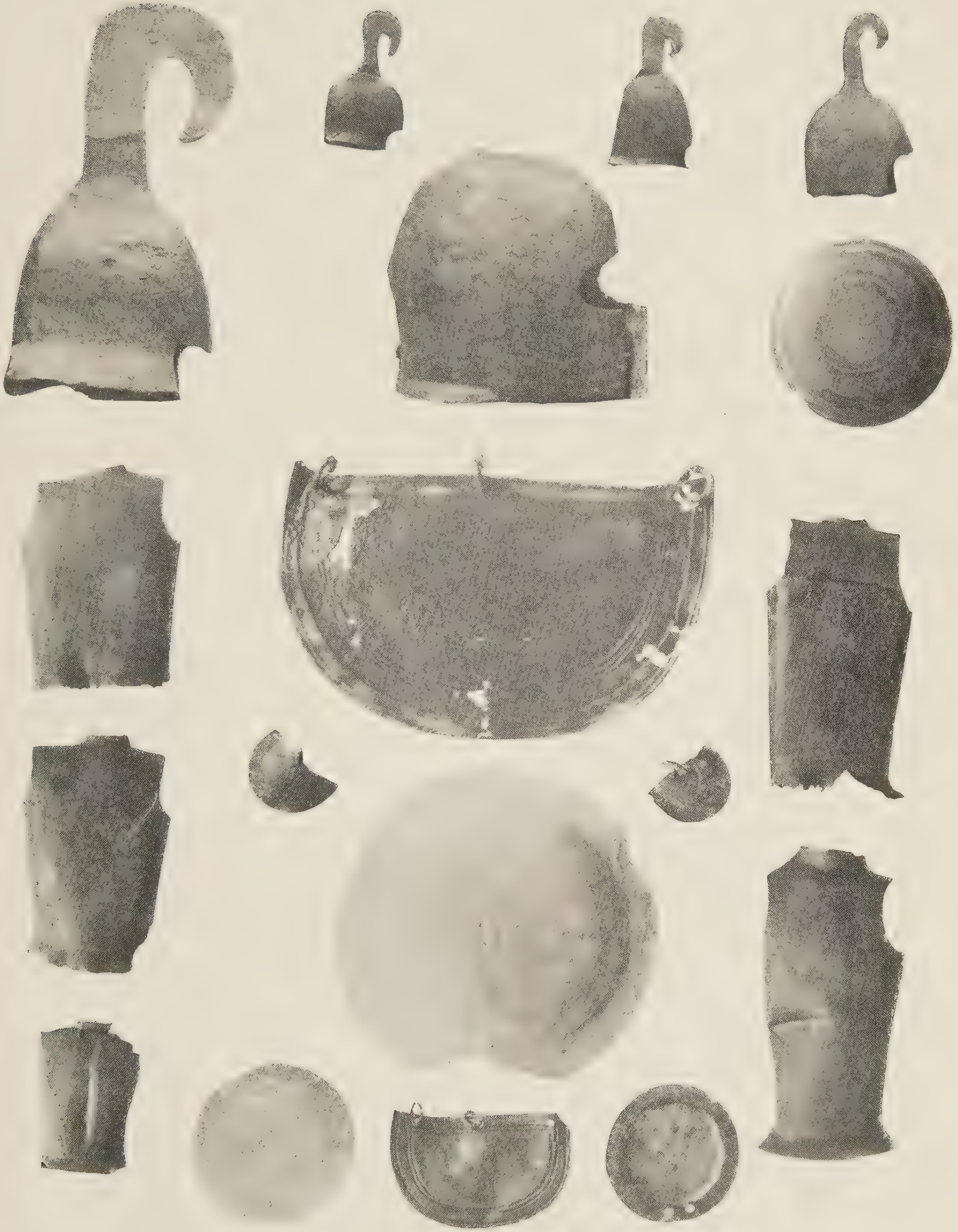
2.

1, PRAESOS: REGION OF MEGALITHIC REMAINS. 2. PALAIKASTRO: INTERIOR OF HOUSE B.

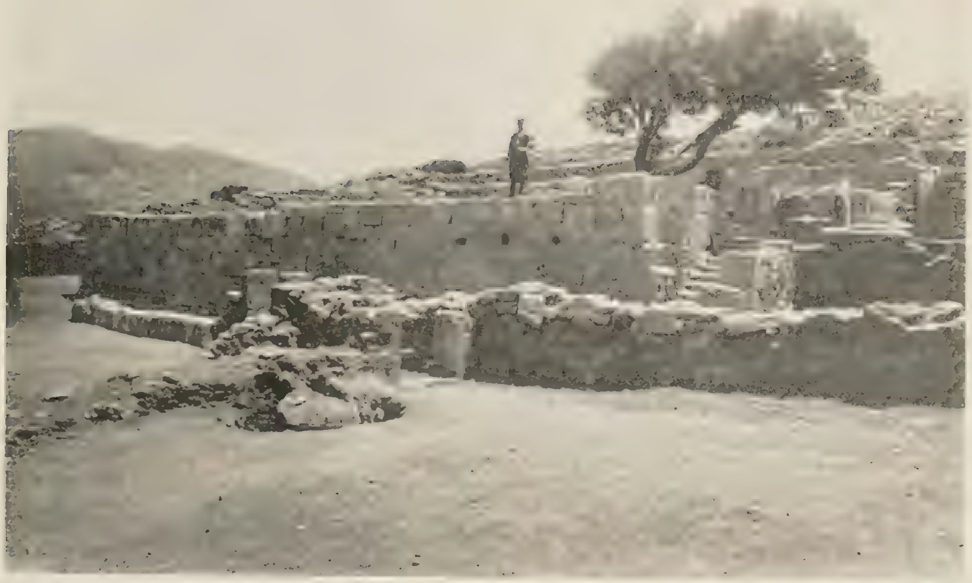


a b c d

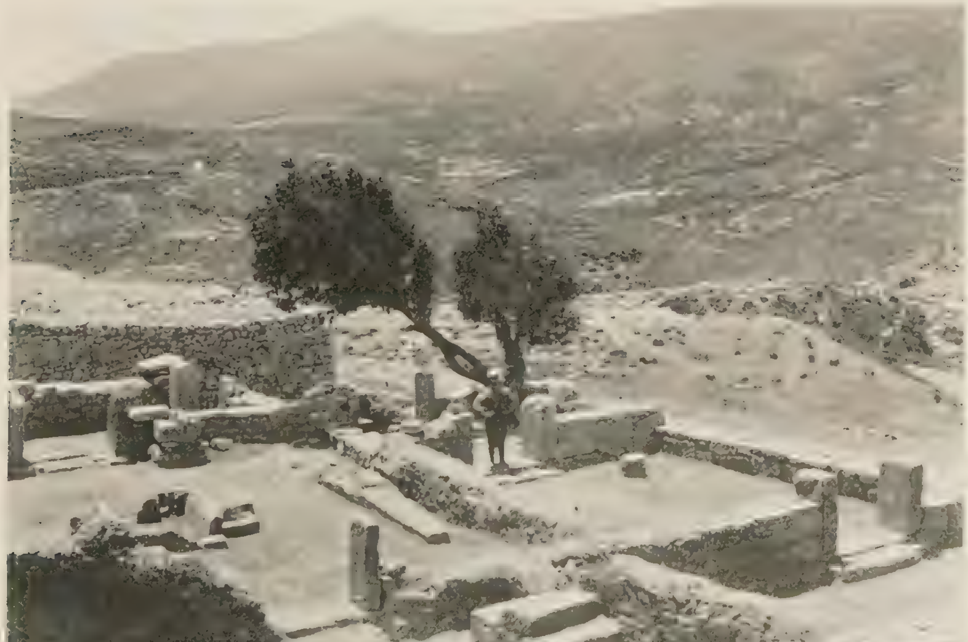
PRAESOS: VASES FROM TOMB C.
(Scale $\frac{1}{3}$.)



PRAESOS: MODELS OF ARMOUR FROM THE ALTAR HILL.
(Scale about 2 : 5.)

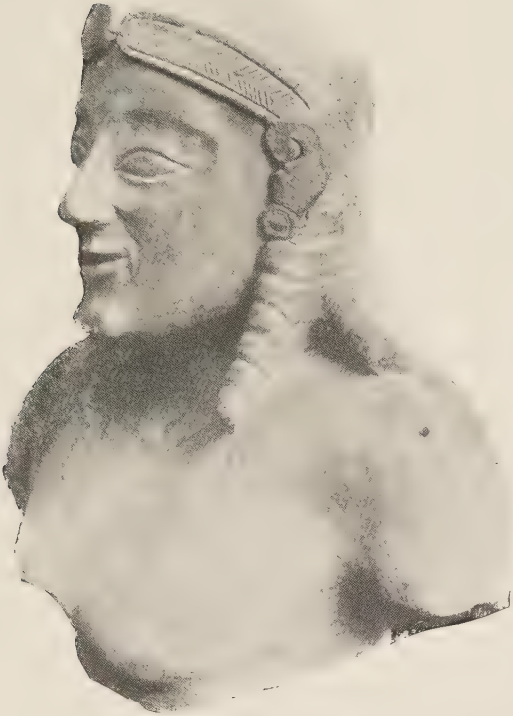


1.

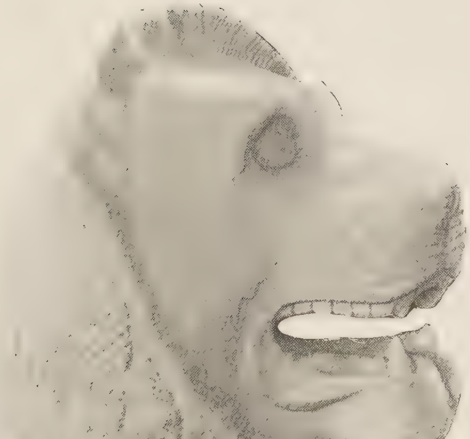


2

Praesos: The Hellenistic House. 1. From the West. 2. From the East.

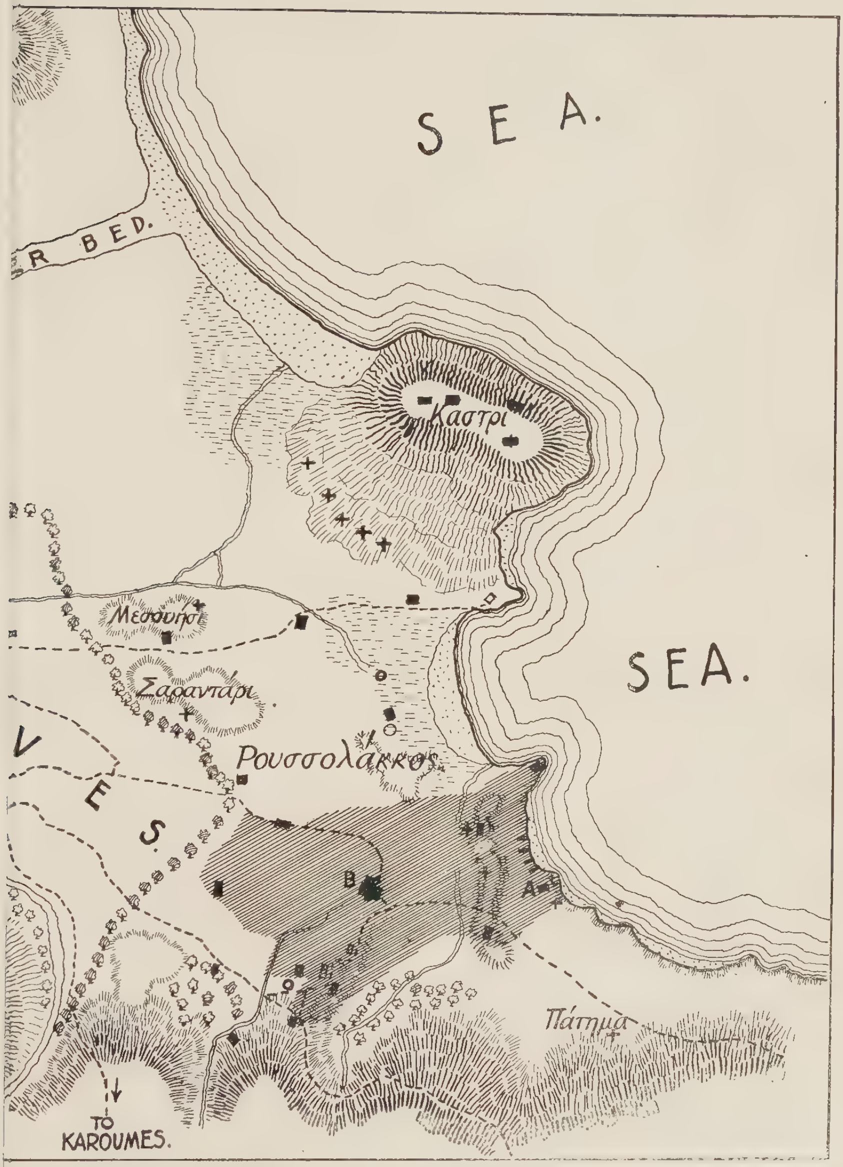


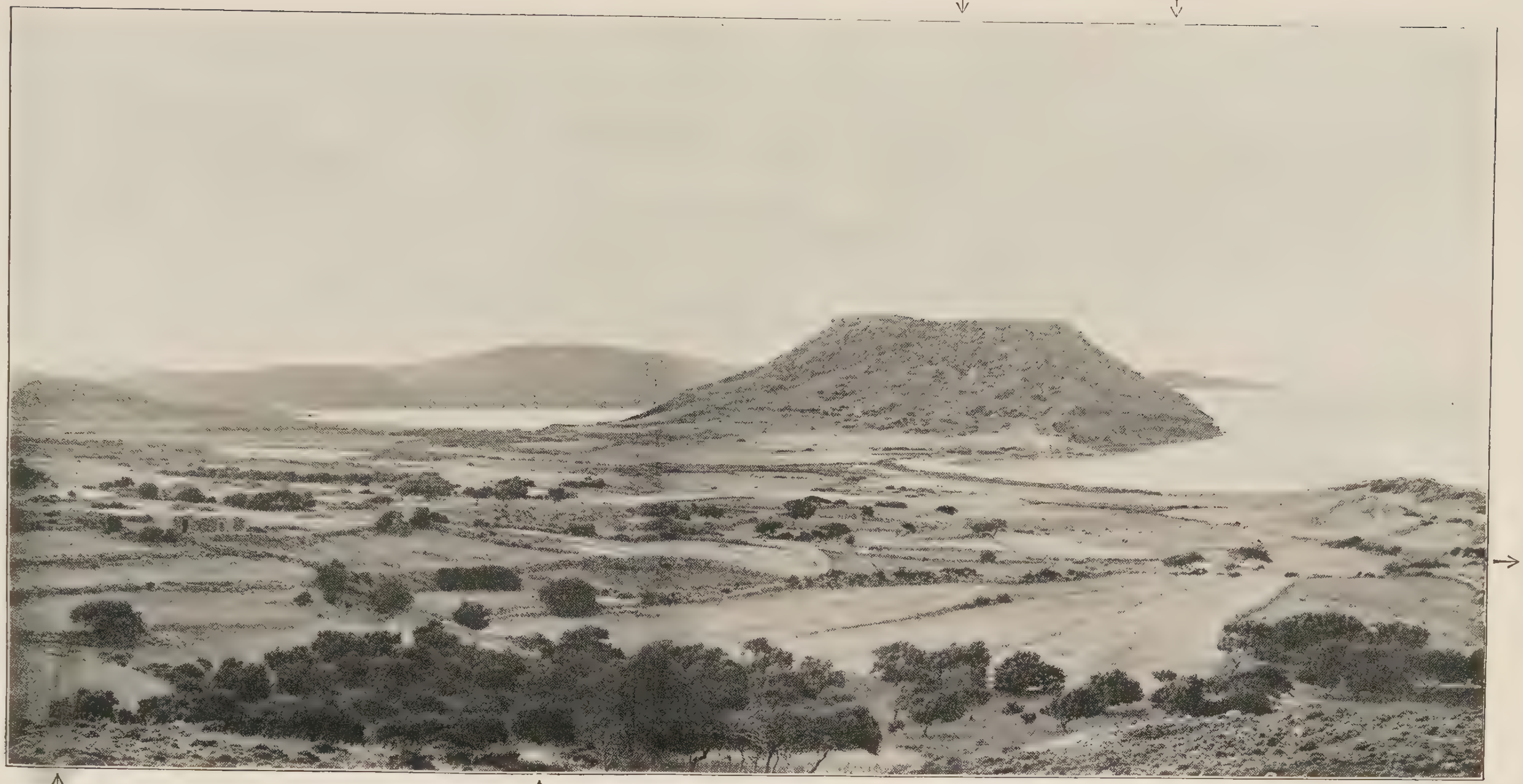
1.



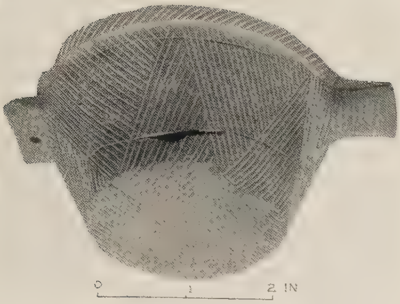
2

Praesos: Terracottas from the Altar Hill.

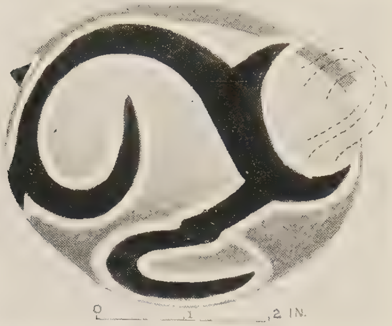

SEA.
R BED.
Καστρι
SEA.
Μεσσυπσι
Σαραντάρι
Ρουσσολακκος
V E S.
B
A
Πάτημα
TO KAROUMES.


Promontory of Kastri.
Harbour.
House A.
Western limit of Mycenaean Town.
House B.
Ridge with Early Cemeteries.

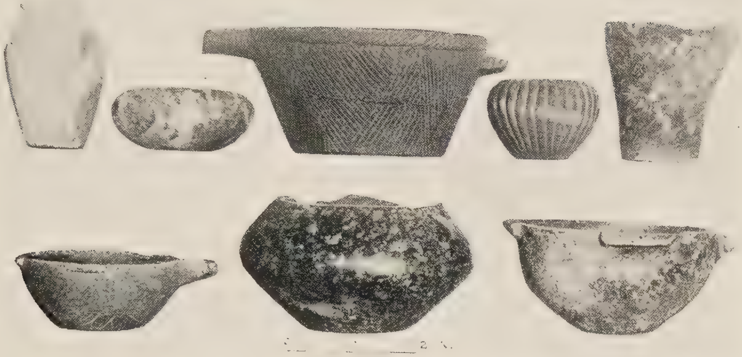
PALAIKASTRO: THE PLAIN FROM THE SOUTH.



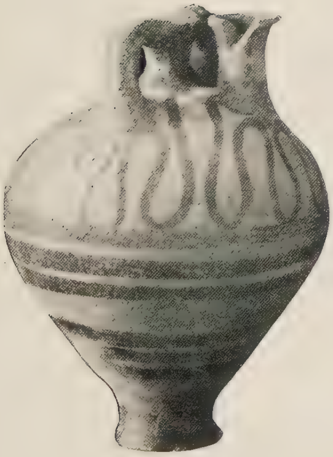
1. Stone Vessel with Spout.



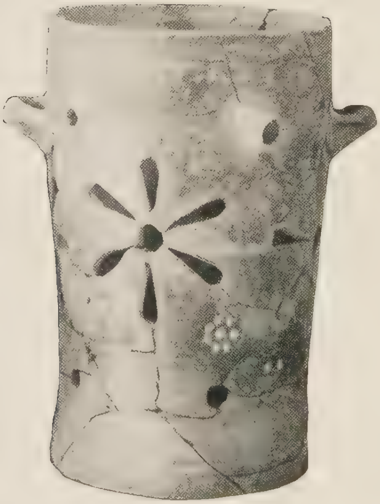
2. Painted Cup.



3. Stone Vases.

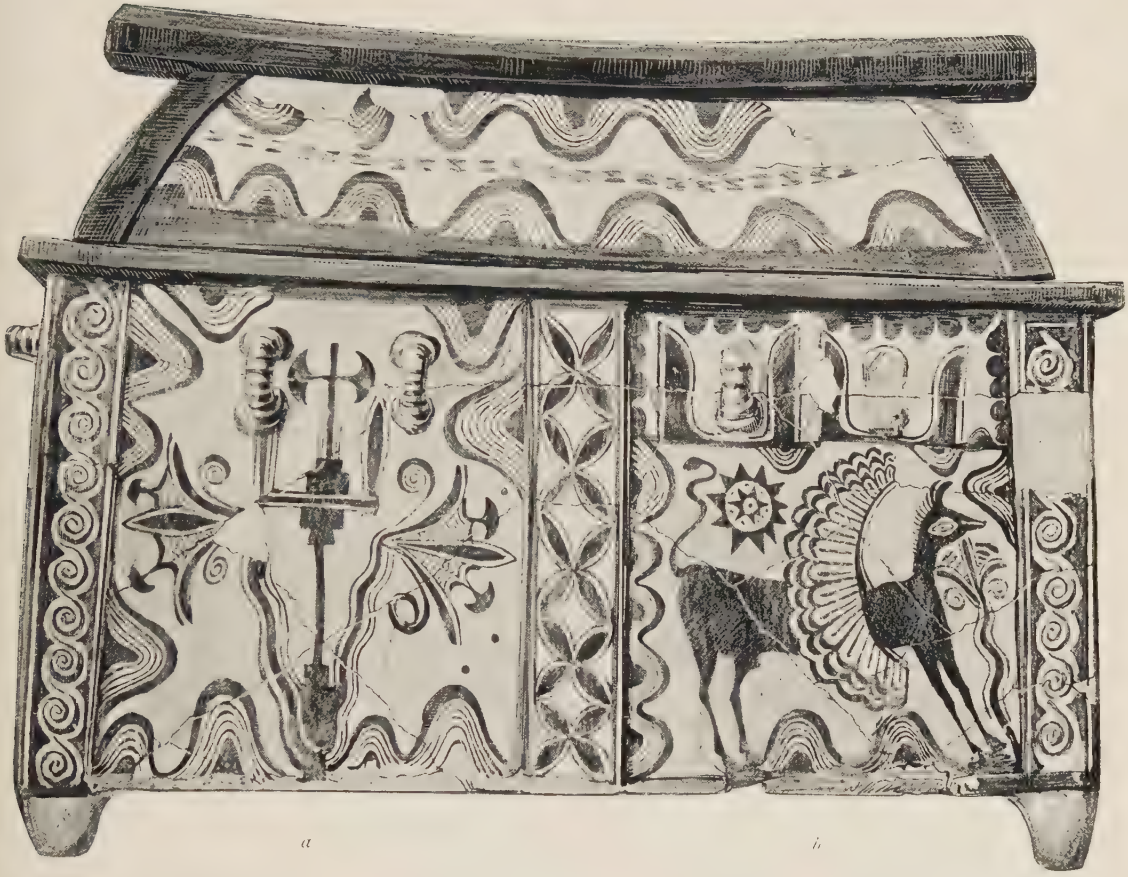


4.

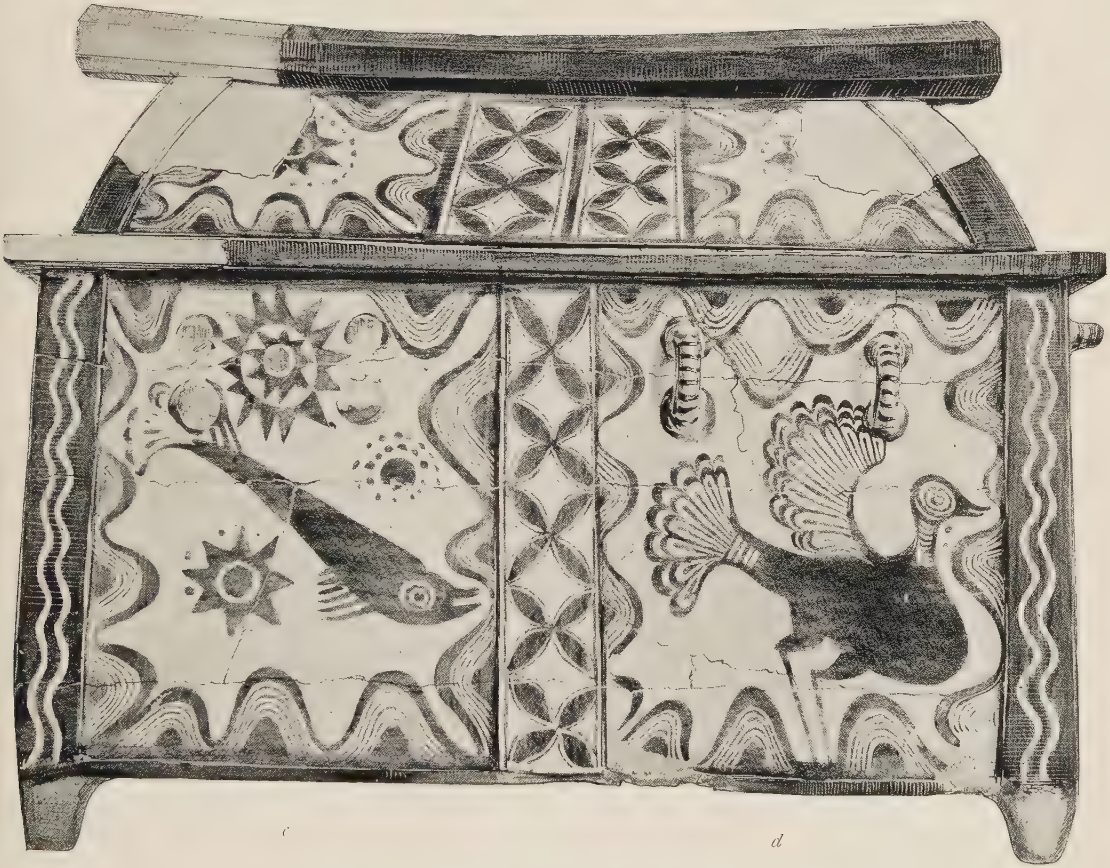


5.

Palaikastro: 1-3 From the Early Cemetery.
4-5 From House B.

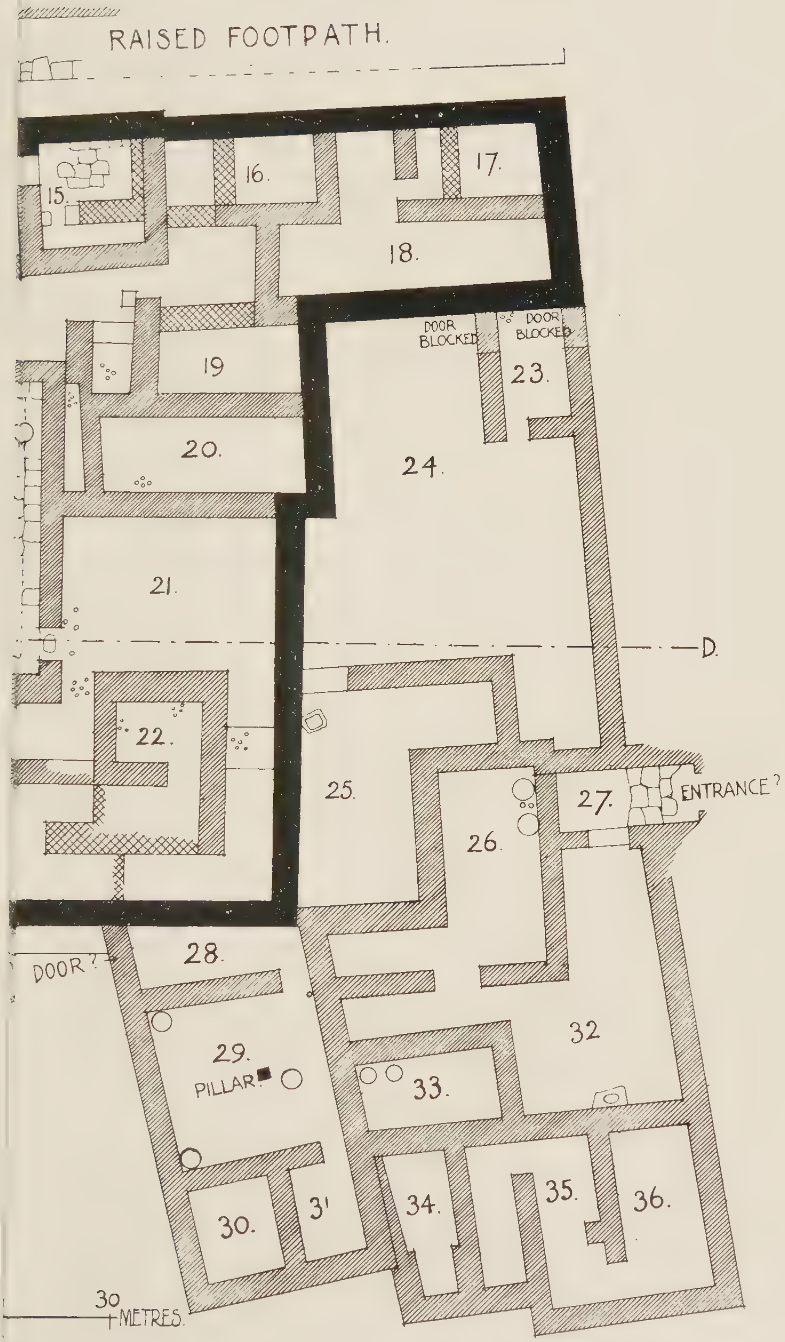


Larnax from Palaikastro.
(Scale about 1 : 9.)



LARNAX FROM PALAIKASTRO.
(Scale about 1 : 9.)

B. S. A., Vol. VIII. (1901—2), Pl. XX.



HEATON COMYN
MENS ET DELT. 1902